

Reagents that advance scientific discovery and human health

2019-2020

製品カタログ



ペプロテックについて

ペプロテックは、科学的発見とヒューマンヘルスを促進する高品質製品を製造することにより、ライフサイエンス研究の土台を築いています。当社は組換えサイトカインの開発と製造に焦点をあて、1988年にアメリカ・ニュージャージー州に設立されました。過去31年間にわたり、当社はアメリカでのGMP製造施設を含む最新の製造施設と、メキシコ、ブラジル、イギリス、フランス、ドイツ、オーストリア、スウェーデン、イスラエル、韓国、中国に現地オフィスを持つグローバル企業に成長しました。

ペプロテックはこれまで2,000以上の製品において、品質、信頼、一貫性を確実にするためのプロトコルを開発 / 最適化してきました。今日の科学者 / 研究者のお客様のニーズと需要に応えられるよう、最高品質の製品とサービスをお届けすることが当社の務めと考えています。

ペプロテックは、サイエンスコミュニティにおいて信頼されるパートナーであることを誇りとしています。

ペプロテックの製品

- サイトカインと抗体の豊富な製品ラインナップ
- 細胞治療、遺伝子治療、組織治療製品製造用のGMP サイトカイン
- 動物由来成分不含（アニマルフリー）サイトカイン
- ELISA 構築用キット
- 細胞培養培地 / 培地添加剤

お立ち寄りください

ペプロテックは、年間を通じて日本再生医療学会、AACR (American Association for Cancer Research)、ISSCR (International Society for Stem Cell Research)、ISCT (International Society for Cellular Therapy)、Society for Neuroscience、American Society for Cell Biologyをはじめ、世界各地の学会展示会に定期的に出展しています。是非とも当社ブースにお立ち寄りください。最新の学会展示会出展スケジュールについては、当社ウェブサイト www.peprotech.com をご覧ください。

ペプロテックの製品に関して

本カタログの掲載製品はすべて研究用です。医療用・臨床診断用としては使用しないよう、十分ご注意ください。

また、製品名に **CARTAGENA** の表記のある製品は「遺伝子組換え生物等の使用等の規制による生物の多様性の確保に関する法律（通称：カルタヘナ法）」の使用規制対象製品です。ご使用に際しては、法規制に則し適切にお取り扱いください。

サイズに関して

組換えタンパク質では動物由来成分不含組換えタンパク質を含め、一部製品を除き、本カタログに掲載した Size A、Size B、1mg のサイズ以外に、100μg、250μg、500μg もご利用いただけます（ただし GMP サイトカインは除く）。詳細に関しては、輸入代理店 / 販売取扱店までお問い合わせください。

価格に関して

本カタログには価格が掲載されておりません。価格、納期等に関しては、輸入代理店 / 販売取扱店までお問い合わせください。

目次

GMP サイトカイン	4-5
細胞培養培地製品	6-10
ELISA バッファーキット	11
サイトカインパッケージ	12
製品(アルファベット順)	13-135
図表	
ケモカイン命名法	136
FGF ファミリー	137
TGF- β スーパーファミリー	138-139
ニューロトロフィン/神経新生サイトカイン	140
TNF 命名法	141
VEGF/PDGF ファミリー	142
TGF- β リガンドのアンタゴニスト	143
血漿リポタンパク質の一般的特徴	143
アポタンパク質の分類	143
一般的な略号	144
技術情報	
RUO サイトカイン FAQ	145
GMP サイトカイン FAQ	146
ヒトES/iPS 細胞用維持培地 FAQ	147-148
動物由来成分不含培地添加剤キット FAQ	148
抗体の抗原親和性精製	149-151
抗体 FAQ	152
ELISA	153-155
ELISA FAQ	156
ELISA トラブルシューティングガイド	157-158
ウェスタンブロット法(ウェスタンブロット法) FAQ	159
ウェスタンブロット法 トラブルシューティングガイド	160-164
索引	165-177
ペプロテック ワールドワイド	178

GMP サイトカイン



細胞治療・再生医療の明るい未来を切り開くために

急速に発展している再生医療の分野は、数々の疾病・負傷・遺伝性疾患に対する新たな解決法を生み出す絶好の機会を提供しています。免疫学、発生生物学、遺伝学、細胞生物学における現代の進歩は、この新たな分野における研究を加速し、関連する治療法が生まれる大きな可能性を切り開こうとしています。

細胞治療が研究室から患者のベッドサイドへと移行すると、最高レベルの品質と安全性を確保することが非常に重要な課題となります。当社の PeproGMP® サイトカインは、この課題に取り組む研究者の皆様を支援します。臨床応用に向けた細胞治療製品、遺伝子治療製品、組織工学製品に関するアメリカ連邦政府の要件および実施基準に沿った PeproGMP® サイトカインは、US FDA の GMP (Good Manufacturing Practices) 規則と ISO 9001 の品質マネジメントシステム規格に準拠した製造および試験が行われており、動物由来成分を使用していません。

PeproGMP® サイトカインは、USP (米国薬局方) <1043> Ancillary Materials for Cell, Gene, and Tissue-Engineered Products (細胞、遺伝子および組織工学製品の製造関連物質) に記載されているとおり、*ex vivo* 製造工程での安全性、純度、簡便な使用を実現しています。

- ISO7 のクリーンルームと管理されたラボ
- 適格性評価およびバリデーションプログラム
- 材料管理
- 要員研修プログラム
- 環境モニタリング
- 機器モニタリング
- 機器の校正とメンテナンス
- 厳しい品質管理プログラム
- 文書管理と記録



製品名	カタログ番号	サイズ
PeproGMP® Human Activin A	GMP120-14E-50µg	50 µg
PeproGMP® Human Activin A	GMP120-14E-100µg	100 µg
PeproGMP® Human EGF	GMP100-15-100µg	100 µg
PeproGMP® Human EGF	GMP100-15-500µg	500 µg
PeproGMP® Human FGF-basic.....	GMP100-18B-25µg.....	25 µg
PeproGMP® Human FGF-basic.....	GMP100-18B-100µg.....	100 µg
PeproGMP® Human FGF-basic	GMP100-18B-1mg.....	1 mg
PeproGMP® Human Flt3-Ligand	GMP300-19-50µg	50 µg
PeproGMP® Human Flt3-Ligand	GMP300-19-100µg	100 µg
PeproGMP® Human Heregulin-β1	GMP100-03-50µg	50 µg
PeproGMP® Human Heregulin-β1	GMP100-03-100µg	100 µg
PeproGMP® Human IL-2.....	GMP200-02-50µg	50 µg
PeproGMP® Human IL-2.....	GMP200-02-100µg	100 µg
PeproGMP® Human IL-2.....	GMP200-02-1mg	1 mg
PeproGMP® Human IL-3	GMP200-03-50µg	50 µg
PeproGMP® Human IL-3.....	GMP200-03-100µg	100 µg
PeproGMP® Human IL-6.....	GMP200-06-10µg	10 µg
PeproGMP® Human IL-6.....	GMP200-06-100µg	100 µg
PeproGMP® Human KGF	GMP100-19-50µg	50 µg
PeproGMP® Human KGF	GMP100-19-100µg	100 µg
PeproGMP® Human PDGF-AA	GMP100-13A-50µg	50 µg
PeproGMP® Human PDGF-AA	GMP100-13A-100µg	100 µg
PeproGMP® Human SCF.....	GMP300-07-50µg	50 µg
PeproGMP® Human SCF.....	GMP300-07-100µg	100 µg
PeproGMP® Human TPO	GMP300-18-50µg	50 µg
PeproGMP® Human TPO	GMP300-18-100µg	100 µg
PeproGMP® Human VEGF ₁₆₅	GMP100-20-50µg	50 µg
PeproGMP® Human VEGF ₁₆₅	GMP100-20-100µg	100 µg

当社では継続的に PeproGMP® サイトカインのラインナップを広げていきます。最新の製品リストについては、ウェブサイト www.peprotech.com をご覧ください。

品質保証／品質管理

ペプロテックでは、原材料や機器の管理から、施設のメンテナンス（環境モニタリング）、製造工程、内部監査、査察工程に至るまで、品質マネジメントシステムのあらゆる面が、確実に US FDA の GMP および適用されるすべての規制および基準要件に適合するようにしています。

当社は、PeproGMP® サイトカインが純度、同一性、安全性、活性、一貫性に関する厳しい基準に適合していることを検証するために、広範な品質管理試験を実施しています。

細胞培養培地製品

ヒト間葉系幹細胞用維持培地

PeproGrow™ hMSC

PeproGrow™ hMSC は、異種由来成分やフェノールレッドを含まないヒト血清含有完全培地で、完全な多分化能を維持しながら脂肪由来ヒト間葉系幹細胞の *in vitro* 増殖培養を行うことを本来の目的として設計されました。開発の段階で、この培地は、接着培養法、浮遊培養法のいずれにおいても、脂肪組織由来、骨髄由来、臍帯由来、胎盤由来、尿由来の間葉系幹細胞の持続的増殖に適していることが明らかになりました。最適な結果を得るには、当社の動物由来成分不含ヒトビトロネクチンマトリックスを表面コーティング試薬として使用した表面上で培養を行う必要がありますが、他社製フィブロネクチンやビトロネクチンなど、他の適した細胞外マトリックスを使用することも可能です。

American CryoStem 社（アメリカ・ニュージャージー州）と共同で設計開発した PeproGrow™ hMSC は、ヒト血清成分含有の基礎培地 500 mL ボトルと、凍結乾燥された動物由来成分不含の成長因子成分のバイアル（1 本）がセットになっています。凍結乾燥された成長因子成分を基礎培地に加えることで、ヒト間葉系幹細胞の最適な増殖培養に必要なすべての成長因子と添加剤を含んだ完全培地となります。

別売関連製品として Animal-Free Human Vitronectin Matrix and Buffer Kit をご用意しています。



製品名

カタログ番号

PeproGrow™ hMSC Medium 500mL Kit	XF-hMSC-500
Basal Medium	
Growth Factor Component	

別売関連製品

製品名

カタログ番号

Animal-Free Human Vitronectin Matrix and Buffer Kit	AF-VMB-220
Animal-Free Human Vitronectin Matrix (500µg)	
PBS + Kolliphor P 188 (220mL)	

ヒトES細胞およびヒトiPS細胞用維持培地

PeproGrow™ hESC

PeproGrow™ hESC は、血清やフェノールレッドを含んでいない、化学的組成が完全に明らかなフィーダーフリーのヒト ES 細胞およびヒト iPS 細胞用維持・増殖培地です。表面コーティング試薬として当社の動物由来成分不含ヒトビトロネクチンマトリックスの使用が最も適していますが、Matrigel® または Synthemax® II-SC（ともに Corning 社）の使用も可能です。

本培地は、未分化多能性（SSEA4+/Oct4+）のヒト ES 細胞およびヒト iPS 細胞の培養への使用を目的としており、フローサイトメトリーにより自発的分化率が 15% 未満と示されています。独自組成の本培地には、FGF-basic などの関連成長因子が使用されていますが、現在販売されている他のヒト ES 細胞および iPS 細胞用培地の大半に添加されているインスリンは含まれていません。

ラトガース大学（アメリカ・ニュージャージー州）Stem Cell Training Course とペプロテックが共同で開発した PeproGrow™ hESC は、基礎培地 500mL または 100mL ボトルと凍結乾燥された成長因子成分のバイアル（1 本）がセットになっています。

二つの別売関連製品として、Animal-Free Human Vitronectin Matrix and Buffer Kit、Cell Passaging/Non-Enzymatic Detachment Buffer をご用意しています。



製品名

キット/単品カタログ番号

PeproGrow™ hESC Medium 500mL Kit	hESC-500
Basal Medium.....	BM-hESC-500
Growth Factor Component	GF-hESC-500
PeproGrow™ hESC Medium 100mL Kit	hESC-100
Basal Medium.....	BM-hESC-100
Growth Factor Component	GF-hESC-100

別売関連製品

製品名

カタログ番号

Animal-Free Human Vitronectin Matrix and Buffer Kit	AF-VMB-220
Animal-Free Human Vitronectin Matrix (500µg)	
PBS + Kolliphor P 188 (220mL)	
Cell Passaging/Non-Enzymatic Detachment Buffer	CPD-125
PBS+HEPES+EDTA (125mL)	

細胞培養培地製品 (続き)

内皮細胞用維持培地

PeproGrow™ EPC/PeproGrow™ MacroV/PeproGrow™ MicroV

PeproGrow™ EPC、PeproGrow™ MacroV、PeproGrow™ MicroV は、それぞれ骨髄または末梢血由来内皮前駆細胞用、大血管由来内皮細胞用、小血管由来内皮細胞用に開発した *in vitro* 培養用の内皮細胞用培地です。

これら3種類の培地の組成は、内皮細胞の特徴的な形態と機能を維持し、内皮細胞に特異的かつ重要なマーカーとなる内皮型一酸化窒素合成酵素 (eNOS) の活性を高めます。このため、これら培地は、内皮前駆細胞だけでなく、大血管や微小血管内皮細胞に対しても最適な細胞培養環境を整え、他社製培地を上回る細胞増殖速度を実現しています。

ペプロテックの内皮細胞用培地キットは、基礎培地の 500mL ボトルと、内皮細胞の増殖に欠かせない各種の成長因子成分の入った成長添加剤の小ボトルのセットになっており、成長添加剤を基礎培地に添加するだけで完全培養培地となります。ペプロテックの内皮細胞用培地には、完全培地としての使用期限を短くしたり、実験結果に影響を及ぼす細胞へのストレスやマスキング効果を引き起こす可能性のある抗生物質、抗真菌剤、フェノールレッドを含みません。

製品名	カタログ番号
PeproGrow™ EPC Medium Kit	700-EPC
Basal Medium	
Growth Supplement EPC*	
PeproGrow™ MacroV Medium Kit	700-MacroV
Basal Medium	
Growth Supplement MacroV*	
PeproGrow™ MicroV Medium Kit	700-MicroV
Basal Medium	
Growth Supplement MicroV*	

* FBS含有



CHO-S細胞用維持培地

PeproGrow™ AF-CHO

PeproGrow™ AF-CHO は、CHO-S 細胞 (Thermo Fisher Scientific 社 カタログ番号 11619-012、R800-07 または A11557-01) の *in vitro* 培養用として、浮遊培養法による組換えタンパク質の発現を使用目的とした動物由来成分やタンパク質を含まない無血清完全培地です。本製品は L-アラニル-L-グルタミン、アミノ酸、ビタミン、塩類、非動物由来の加水分解物を含む調製済み培地で、播種密度 0.5×10^6 cells/mL での 5 日間回分培養への使用を推奨しています。Thermo Fisher Scientific 社の CHO-S 細胞には馴化プロセスは必要ありません。



製品名	カタログ番号	容量
PeproGrow™ AF-CHO Medium	AF-CHO.....	1L

HEK293細胞用維持培地

PeproGrow™ HEK293

PeproGrow™ HEK293 は、動物由来成分やタンパク質を含まない、化学的組成が明らかな無血清完全培地で、HEK293 細胞 (Thermo Fisher Scientific 社 FreeStyle™ 293-F 細胞、カタログ番号 R790-07) の *in vitro* 培養に用います。本培地は、浮遊培養法による組換えタンパク質の発現を使用目的としており、播種密度 0.6×10^6 cells/mL での 5 日間回分培養への使用を推奨しています。培地は調整済みで、L-アラニル-L-グルタミン、アミノ酸、ビタミン、塩類を含んでいます。Thermo Fisher Scientific 社の FreeStyle™ 293-F 細胞には馴化プロセスは必要ありません。



製品名	カタログ番号	容量
PeproGrow™ HEK293 Medium	AF-CD-HEK293.....	1L

細胞培養培地製品 (続き)

無血清細胞培養培地用添加剤キット

PeproGrow-1

PeproGrow-1 は、哺乳類接着細胞株の増殖維持を目的とした、動物由来成分やタンパク質を含まない、化学的組成が明らかな無血清細胞培養培地用添加剤です。HEK293 細胞、HeLa 細胞、A549 細胞で試験済みで、他の接着細胞の培養条件の改善も図ることができると期待されています（ただし、試験済み以外の細胞に対する適切性を保証するものではありません）。

本キット製品は、DMEM/F12 基礎培地（Thermo Fisher Scientific 社 カタログ番号 31331）に添加して使用することを目的としており、本キットで 10L の培地が調製可能です。キットは化学的組成が明らかな塩類を含有する血清代替液（100 ×）と、無血清培地での細胞増殖向上を目的とした脂肪酸および脂質を含有する脂質混合液（200 ×）で構成されています。

注：使用する DMEM/F12 基礎培地はフェノールレッドを含むことができます（フェノールレッド不含の場合は、お客様の判断により添加することも可能です）。DMEM/F12 基礎培地は HEPES 不含のものを使用して下さい。PeproGrow-1 は Thermo Fisher Scientific 社の DMEM/F12 基礎培地のみを使用して試験しており、他社の DMEM/F12 基礎培地では試験しておりません。

製品名

キット/単品カタログ番号

PeproGrow-1 Kit	700-C100
Serum Replacement Solution.....	SR-100
Lipid Mixture Solution.....	LM-200



ELISA バッファークット

ABTS ELISA Buffer Kit/TMB ELISA Buffer Kit

ペプロテックの ABTS ELISA Buffer Kit および TMB ELISA Buffer Kit は、それぞれ当社の ABTS ELISA Development Kit、TMB ELISA Development Kit と併せてご使用いただいたときに最適なパフォーマンスが得られるよう特別に調製されています。本製品には付属の 10 枚の 96 ウェル ELISA プレートの測定に必要な構成成分がすべて揃っており、詳細な取扱説明書も含まれています。測定への干渉を最小限に抑え、保存期間を最大限に保つために、すべての試薬に滅菌ろ過処理を施しています。当社の ELISA Development Kit と一緒のご購入をお勧めいたします。

使用が簡単なこの ELISA Buffer Kit では、付属のプレートに捕捉抗体があらかじめコーティングされておりません（本製品には抗体は含まれておりません）。本キットをひとつの独立した製品としてご購入することも可能ですので、すでに所有されている捕捉抗体や検出抗体を用いて測定法を構築し、最適化することもできます。ELISA における実際の抗体濃度および検出範囲は測定法により異なります。

ABTS ELISA Buffer Kit 内容

- 20 × プレートコーティングバッファ（PBS）
- 1 × ブロッキングバッファ
- 20 × 検体希釈液
- 20 × 洗浄バッファ
- 調製済み ABTS 溶液
- 未コーティング滅菌済み 96 ウェル ELISA プレート 10 枚
- プレートシーリングフィルム 50 枚
- バッファータ取扱説明書

製品名

カタログ番号

ABTS ELISA Buffer Kit 900-K00

TMB ELISA Buffer Kit 内容

- 20 × プレートコーティングバッファ（PBS）
- 1 × ブロッキングバッファ
- 20 × 検体希釈液
- 20 × 洗浄バッファ
- 調製済み TMB 溶液
- 調製済み反応停止液
- 未コーティング滅菌済み 96 ウェル ELISA プレート 10 枚
- プレートシーリングフィルム 50 枚
- バッファータ取扱説明書

製品名

カタログ番号

TMB ELISA Buffer Kit 900-T00

サイトカインパッケージ

ペプロテックのサイトカインパッケージは、共用の使用目的で購入されることの多いサイトカインが組み合わされたパッケージ製品です。それぞれ個々のサイトカインを購入される必要がなく、パッケージとしてのお得な製品となっています。

樹状細胞用サイトカインパッケージ

Human Dendritic Cell Cytokine Package

ヒト樹状細胞の培養に必要な主要サイトカインのパッケージセット。

カタログ番号:HDC

以下のバイアル2本の組換えサイトカインが含まれます。

- 100µg Human IL-4
- 100µg Human GM-CSF

Animal-Free Human Dendritic Cell Cytokine Package

上記パッケージに動物由来成分不含製品を使用したセット。

カタログ番号:AF-HDC

以下のバイアル2本の組換えサイトカインが含まれます。

- 100µg Animal-Free Human IL-4
- 100µg Animal-Free Human GM-CSF

Murine Dendritic Cell Cytokine Package

マウス樹状細胞の培養に必要な主要サイトカインのパッケージセット。

カタログ番号:MDC

以下のバイアル2本の組換えサイトカインが含まれます。

- 100µg Murine IL-4
- 100µg Murine GM-CSF

Animal-Free Murine Dendritic Cell Cytokine Package

上記パッケージに動物由来成分不含製品を使用したセット。

カタログ番号:AF-MDC

以下のバイアル2本の組換えサイトカインが含まれます。

- 100µg Animal-Free Murine IL-4
- 100µg Animal-Free Murine GM-CSF

造血幹細胞増殖用サイトカインパッケージ

Human Hematopoietic Stem Cell Expansion Cytokine Package

ヒト造血幹細胞の培養に必要な主要サイトカインのパッケージセット (IL-3包装品)。

カタログ番号:HHSC3

以下のバイアル4本の組換えサイトカインが含まれます。

- 100µg Human Flt3 Ligand
- 100µg Human SCF
- 100µg Human TPO
- 10µg Human IL-3

Animal-Free Human Hematopoietic Stem Cell Expansion Cytokine Package

上記パッケージに動物由来成分不含製品を使用したセット。

カタログ番号:AF-HHSC3

以下のバイアル4本の組換えサイトカインが含まれます。

- 100µg Animal-Free Human Flt3 Ligand
- 100µg Animal-Free Human SCF
- 100µg Animal-Free Human TPO
- 10µg Animal-Free Human IL-3

Human Hematopoietic Stem Cell Expansion Cytokine Package

ヒト造血幹細胞の培養に必要な主要サイトカインのパッケージセット (IL-6包装品)。

カタログ番号:HHSC6

以下のバイアル4本の組換えサイトカインが含まれます。

- 100µg Human Flt3 Ligand
- 100µg Human SCF
- 100µg Human TPO
- 20µg Human IL-6

Animal-Free Human Hematopoietic Stem Cell Expansion Cytokine Package

上記パッケージに動物由来成分不含製品を使用したセット。

カタログ番号:AF-HHSC6

以下のバイアル4本の組換えサイトカインが含まれます。

- 100µg Animal-Free Human Flt3 Ligand
- 100µg Animal-Free Human SCF
- 100µg Animal-Free Human TPO
- 20µg Animal-Free Human IL-6

Murine Hematopoietic Stem Cell Expansion Cytokine Package

マウス造血幹細胞の培養に必要な主要サイトカインのパッケージセット (IL-3包装品)。

カタログ番号:MHSC3

以下のバイアル4本の組換えサイトカインが含まれます。

- 100µg Murine Flt3 Ligand
- 100µg Murine SCF
- 100µg Murine TPO
- 10µg Murine IL-3

Murine Hematopoietic Stem Cell Expansion Cytokine Package

マウス造血幹細胞の培養に必要な主要サイトカインのパッケージセット (IL-6包装品)。

カタログ番号:MHSC6

以下のバイアル4本の組換えサイトカインが含まれます。

- 100µg Murine Flt3 Ligand
- 100µg Murine SCF
- 100µg Murine TPO
- 10µg Murine IL-6

※ サイトカインパッケージに含まれる組換えサイトカインは大腸菌発現製品です。

Activin A

Synonyms: Inhibin beta-1, FRP, FSH (Follicle-Stimulating Hormone)-releasing protein, Erythroid Differentiation Factor (EDF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human/Murine/Rat Activin A	CARTAGENA 120-14	<i>Insect cells</i>	26.0 kDa	2µg	10µg 1mg
Human/Murine/Rat Activin A	120-14E	<i>E. coli</i>	26.0 kDa	2µg	10µg 1mg
Human/Murine/Rat Activin A	120-14P	<i>CHO cells</i>	26.0 kDa	2µg	10µg 1mg

Additional sizes available please inquire

PeperoGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeperoGMP® Human Activin A	GMP120-14E-50µg	<i>E. coli</i>	26.0 kDa	50µg
PeperoGMP® Human Activin A	GMP120-14E-100µg	<i>E. coli</i>	26.0 kDa	100µg

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human/Murine/Rat Activin A	AF-120-14E	<i>E. coli</i>	26.0 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Adiponectin

Synonyms: Acrp-30, APM-1, AdipoQ, Gelatin-binding protein, GBP-28

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Adiponectin	CARTAGENA 450-24	<i>Insect cells</i>	25.9 kDa	5µg	25µg 1mg
Murine Adiponectin	CARTAGENA 315-26	<i>Insect cells</i>	25.8 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Adiponectin	500-P239	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Adiponectin	500-P239BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human Adiponectin	500-M126	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

AITRL *Activation-Induced TNFR member Ligand*

Synonyms: TNFSF18, GITRL, TL-6

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human AITRL	310-22	<i>E. coli</i>	14.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human AITRL	500-P244	<i>Rabbit</i>	I, E, WB	50µg	100µg 1mg
Biot. Anti-Human AITRL	500-P244BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: I = IHC, E = ELISA, WB = Western blot, N = Neutralization

Aminopeptidase

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Aeromonas Aminopeptidase	100-10	<i>E.coli</i>	31.4 kDa	100µg	500µg 1mg

Additional sizes available please inquire

Amphiregulin

Synonyms: AR, AREG, Colorectum cell-Derived Growth Factor (CRDGF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Amphiregulin	100-55B	<i>E.coli</i>	11.3 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Amphiregulin	500-P322	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Amphiregulin	500-P322BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

ANG-1, ANG-2 *Angiopoietin-1, -2*

Synonyms: ANG-1: ANGPT1, KIAA0003; ANG-2: ANGPT2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ANG-1	130-06	<i>HeLa cells</i>	56.3 kDa	5µg	20µg 1mg
Human ANG-2	130-07	<i>CHO cells</i>	50.1 kDa	5µg	20µg 1mg

Additional sizes available please inquire

ANGPTL-3 *Angiopoietin-like protein 3*

Synonyms: ANG-5, ANGPT5

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ANGPTL-3	130-18	<i>CHO cells</i>	52.9 kDa	10µg	50µg 1mg

Additional sizes available please inquire

ANGPTL-7 *Angiopoietin-like protein 7*

Synonyms: Angiopoietin-related protein 7, Cornea-derived transcript 6 protein, CDT6

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ANGPTL-7	CARTAGENA	130-22	<i>Insect cells</i>	38.2 kDa	5µg 20µg 1mg

Additional sizes available please inquire

ApoA-1 *Apolipoprotein A-1*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ApoA-1	350-11	<i>E.coli</i>	28.2 kDa	20µg 100µg 1mg	

Additional sizes available please inquire

ApoE2 *Apolipoprotein E2*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ApoE2	350-12	<i>E.coli</i>	34.3 kDa	100µg 500µg 1mg	

Additional sizes available please inquire

ApoE3 *Apolipoprotein E3*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ApoE3	350-02	<i>E.coli</i>	34.4 kDa	100µg 500µg 1mg	

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human ApoE3	500-P238	<i>Rabbit</i>	E, WB	50µg 100µg 1mg	
Biot. Anti-Human ApoE3	500-P238BT	<i>Rabbit</i>	E, WB	25µg 50µg 1mg	

Biot. = Biotinylated **Key:** E = ELISA, WB = Western blot

ApoE4 *Apolipoprotein E4*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ApoE4	350-04	<i>E.coli</i>	34.4 kDa	100µg 500µg 1mg	

Additional sizes available please inquire

Apo-SAA, Apo-SAA1

Synonyms: Apo-SAA: Serum amyloid A protein (SAA), Serum amyloid A apolipoprotein, Amyloid fibril protein AA, TP53I4, PIG4; APO-SAA1: Serum amyloid A-1 protein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Apo-SAA	300-13	<i>E.coli</i>	11.7 kDa	10µg	50µg	1mg
Human Apo-SAA1	300-53	<i>E.coli</i>	11.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat Apo-SAA1	AF-300-53	<i>E.coli</i>	11.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

APRIL *A Proliferation-Inducing Ligand*

Synonyms: TNFSF13, TRDL-1, TALL-2, CD256

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human APRIL	CARTAGENA 310-10C	<i>Insect cells</i>	16.3 kDa	2µg	10µg	1mg
Murine APRIL	315-13	<i>E.coli</i>	21.9 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human APRIL	500-P192	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human APRIL	500-P192BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Arg-C

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Lysobacter Enzymogenes Arg-C	CARTAGENA 450-54	<i>Insect cells</i>	26.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Arginine Deiminase

Synonyms: ADI

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Mycoplasma Arginine Deiminase	150-12	<i>E.coli</i>	46.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Artemin

Synonyms: ART, ARTN, Enovin, Neublartin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Artemin	450-17	<i>E.coli</i>	24.2 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Artemin	AF-450-17	<i>E.coli</i>	24.2 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Artemin	500-P245	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Artemin	500-P245BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated **Key:** E = ELISA, WB = Western blot

4-1BB Ligand

Synonyms: TNFSF9, CD137L

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human 4-1BB Ligand	310-11	<i>E.coli</i>	19.5 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human 4-1BB Ligand	500-P169	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human 4-1BB Ligand	500-P169BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated **Key:** E = ELISA, WB = Western blot

4-1BB Receptor

Synonyms: TNFRSF9, CD137, T-cell antigen ILA, CDw137

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human 4-1BB Receptor	310-15	<i>E.coli</i>	17.7 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human 4-1BB Receptor	500-P167G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human 4-1BB Receptor	500-P167GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated **Key:** E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human 4-1BB Receptor	ABTS CATALOG # 900-K208
----------------------	--------------------------------

A-B

B7-1 Fc

Synonyms: B7, BB1, CD80

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human B7-1 Fc	310-32	<i>CHO cells</i>	50.0 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Murine B7-1	500-P128	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine B7-1	500-P128BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

B7-2 Fc

Synonyms: B70, CD86, ETC1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human B7-2 Fc	310-33	<i>CHO cells</i>	51.2 kDa	20µg	100µg	1mg

Additional sizes available please inquire

B7-H2 Fc

Synonyms: Inducible Costimulator-Ligand (ICOSL), B7 homolog 2, B7-like protein Gl50, B7-related protein 1 (B7RP-1), CD275

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human B7-H2 Fc	310-37	<i>CHO cells</i>	104.9 kDa	20µg	100µg	1mg

Additional sizes available please inquire

BAFF *B-cell Activating Factor belonging to the TNF Family*

Synonyms: TNFSF13B, TNFSF20, TALL-1, BLyS, THANK, ZTNF4, CD257

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BAFF	310-13	<i>E.coli</i>	17.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BAFF	AF-310-13	<i>E.coli</i>	17.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

BAFF continued on next page...

BAFF *continued...***Polyclonal Antibodies** - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human BAFF	500-P163	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human BAFF	500-P163BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Human BAFF	500-P163G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human BAFF	500-P163GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot, N = Neutralization

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human BAFF	500-M64	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot, N = Neutralization

BAFF Receptor *B-cell Activating Factor belonging to the TNF Receptor Family***Synonyms:** BAFFR, TNFRSF13C, BLyS Receptor 3, CD268**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human BAFF Receptor	310-13R	<i>E.coli</i>	7.7 kDa	10µg	50µg 1mg

Additional sizes available please inquire

BCA-1/BLC (CXCL13) *B-cell Attracting Chemokine-1***Synonyms:** BLR1 Ligand**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human BCA-1 (CXCL13)	300-47	<i>E.coli</i>	10.3 kDa	5µg	20µg 1mg
Murine BCA-1/BLC (CXCL13)	250-24	<i>E.coli</i>	9.8 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human BCA-1 (CXCL13)	500-P141	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human BCA-1 (CXCL13)	500-P141BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

BCMA *B-Cell Maturation Antigen***Synonyms:** TNFRSF17, BCM, CD269**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human BCMA	310-16	<i>E.coli</i>	5.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

BD-1,-2,-3,-4,-5 β -Defensins 1-5

Synonyms: **BD-1:** DEFB1, HBD1; **BD-2:** DEFB2, DEFB4A, Skin-Antimicrobial Peptide 1, SAP1; **BD-3:** DEFB3, DEFB103A; **BD-4:** Beta-Defensin 104, DEFB4; **BD-5:** BD5, DEFB105a, DEFB5

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BD-1 (36 a.a.)	300-51	<i>E.coli</i>	3.9 kDa	5µg	20µg	1mg
Human BD-1 (47 a.a.)	300-51A	<i>E.coli</i>	5.0 kDa	5µg	20µg	1mg
Human BD-2	300-49	<i>E.coli</i>	4.3 kDa	5µg	20µg	1mg
Murine BD-2	250-40	<i>E.coli</i>	5.5 kDa	5µg	20µg	1mg
Human BD-3	300-52	<i>E.coli</i>	5.1 kDa	5µg	20µg	1mg
Human BD-4	300-65	<i>E.coli</i>	6.0 kDa	5µg	20µg	1mg
Human BD-5	300-68	<i>E.coli</i>	5.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine BD-3	AF-250-41	<i>E.coli</i>	4.6 kDa	5µg	20µg	1mg
Human BD-5	AF-300-68	<i>E.coli</i>	5.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

B

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human BD-1	500-P253	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BD-1	500-P253BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human BD-2	500-P161G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BD-2	500-P161GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Human BD-3	500-P241	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BD-3	500-P241BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human BD-4	500-P268	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BD-4	500-P268BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human BD-5	500-P323	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BD-5	500-P323BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human BD-1	ABTS CATALOG # 900-K202
Human BD-2	ABTS CATALOG # 900-K172
Human BD-2	TMB CATALOG # 900-T172
Human BD-3	ABTS CATALOG # 900-K210
Human BD-4	ABTS CATALOG # 900-K435

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human BD-1	ABTS CATALOG # 900-M202
Human BD-2	ABTS CATALOG # 900-M172
Human BD-2	TMB CATALOG # 900-TM172
Human BD-3	ABTS CATALOG # 900-M210
Human BD-4	ABTS CATALOG # 900-M435

BDNF *Brain-Derived Neurotrophic Factor*

Synonyms: Abrineurin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat BDNF	450-02	<i>E.coli</i>	27.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A \$95	Size B \$215	
Human/Murine/Rat BDNF	AF-450-02	<i>E.coli</i>	27.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A \$195	Size B \$250	
Anti-Human/Murine/Rat BDNF	500-P84	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-H/M/R BDNF	500-P84BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Betacellulin

Synonyms: BTC

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Betacellulin	100-50	<i>E.coli</i>	9.0 kDa	5µg	20µg	1mg
Murine Betacellulin	315-21	<i>E.coli</i>	9.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Betacellulin	500-P254	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human Betacellulin	500-P254BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Betacellulin	ABTS CATALOG # 900-K372
--------------------	--------------------------------

BMP-2 *Bone Morphogenetic Protein-2*

Synonyms: BMP-2A

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat BMP-2	120-02	<i>E.coli</i>	26.0 kDa	2µg	10µg	1mg
Human/Murine/Rat BMP-2	120-02C	<i>CHO cells</i>	25.8 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat BMP-2	AF-120-02	<i>E.coli</i>	26.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

BMP-2 continued on next page...

BMP-2 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human/Murine/Rat BMP-2	500-P195	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-H/M/R BMP-2	500-P195BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human/Murine/Rat BMP-2	ABTS CATALOG # 900-K255
Human/Murine/Rat BMP-2	TMB CATALOG # 900-T255

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human/Murine/Rat BMP-2	ABTS CATALOG # 900-M255
Human/Murine/Rat BMP-2	TMB CATALOG # 900-TM255

BMP-3 *Bone Morphogenetic Protein-3*

Synonyms: Osteogenin, BMP-3A

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-3	120-24B	<i>E.coli</i>	25.2 kDa	10µg	50µg	1mg

Additional sizes available please inquire

BMP-4 *Bone Morphogenetic Protein-4*

Synonyms: BMP-2B, DVR4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-4	120-05	<i>HeLa cells</i>	25.6 kDa	1µg	5µg	1mg
Human BMP-4	120-05ET	<i>E.coli</i>	23.9 kDa	2µg	10µg	1mg
Murine BMP-4	315-27	<i>E.coli</i>	23.9 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-4	AF-120-05ET	<i>E.coli</i>	23.9 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human BMP-4	500-M121	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

BMP-5 *Bone Morphogenetic Protein-5*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-5	120-39	<i>CHO cells</i>	31.2 kDa	2µg	10µg	1mg

Additional sizes available please inquire

BMP-6 *Bone Morphogenetic Protein-6*

Synonyms: VGR, VG-1-related protein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-6	120-06	<i>HEK293 cells</i>	26.2 kDa	2µg	10µg	1mg

Additional sizes available please inquire

BMP-7 *Bone Morphogenetic Protein-7*

Synonyms: Osteogenic Protein-1 (OP-1)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-7	120-03P	<i>CHO cells</i>	26.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human BMP-7	500-P198	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BMP-7	500-P198BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human BMP-7	500-M123	<i>Mouse</i>	E	500µg	

Key: E = ELISA, WB = Western blot

BMP-10 *Bone Morphogenetic Protein-10*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-10	120-40	<i>HEK293 cells</i>	24.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

BMP-13/CDMP-2 *Bone Morphogenetic Protein-13*

Synonyms: Cartilage-Derived Morphogenetic Protein-2, GDF-6

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-13/CDMP-2	120-04	<i>E.coli</i>	27.0 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BMP-13/CDMP-2	AF-120-04	<i>E.coli</i>	27.0 kDa	10µg	50µg	1mg

Additional sizes available please inquire

BRAK (CXCL14) *Breast and Kidney-expressed chemokine*

Synonyms: bolekin, NJAC

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BRAK (CXCL14)	300-50	<i>E.coli</i>	9.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human BRAK (CXCL14)	500-P237	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human BRAK (CXCL14)	500-P237BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

BTLA

Synonyms: B- and T-lymphocyte attenuator, B- and T-lymphocyte-associated protein, CD272

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human BTLA Fc	310-43	<i>CHO cells</i>	39.8 kDa	10µg	50µg	1mg

Additional sizes available please inquire

C1 Inhibitor

Synonyms: Plasma protease C1 inhibitor, C1inh, C1 Esterase Protein, C1-inhibiting factor, Serpin G1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human C1 Inhibitor	130-20	<i>CHO cells</i>	49.4 kDa	50µg	200µg	1mg

Additional sizes available please inquire

C5a

Synonyms: Complement Component 5a, Complement 5a, CPAMD4, C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human C5a	300-70	<i>E.coli</i>	8.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human C5a	AF-300-70	<i>E.coli</i>	8.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

C10 (CCL6)

Synonyms: MRP-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Murine C10 (CCL6)	250-06	<i>E.coli</i>	10.7 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Murine C10 (CCL6)	500-P112	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine C10 (CCL6)	500-P112BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Carboxypeptidase-B

Synonyms: Cpb1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Rat Carboxypeptidase-B	400-00	<i>E.coli</i>	35.1 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Cardiotrophin-1

Synonyms: CT-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Cardiotrophin-1	300-32	<i>E.coli</i>	21.1 kDa	2µg	10µg 1mg
Murine Cardiotrophin-1	250-25	<i>E.coli</i>	21.3 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Cardiotrophin-1	500-P101	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Cardiotrophin-1	500-P101BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

sCD4 *soluble CD4*

Synonyms: Cluster determinant 4, T-cell surface glycoprotein CD4, Interleukin IL-16 receptor, T-cell surface antigen T4/Leu-3, Leu-3(a,b), OKT4(a-f), L3T4 (mouse)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD4	110-11	CHO cells	41.3 kDa	10µg	50µg 1mg

Additional sizes available please inquire

sCD8α *soluble CD8 alpha*

Synonyms: CD8A, T-cell surface glycoprotein CD8 alpha chain, T-lymphocyte differentiation antigen T8/Leu-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD8α	310-41	CHO cells	17.6 kDa	10µg	50µg 1mg

Additional sizes available please inquire

sCD14 *soluble CD14*

Synonyms: Monocyte differentiation antigen CD14

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD14	110-01	HEK293 cells	35.6 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human sCD14	500-P320	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human sCD14	500-P320BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

sCD22 *soluble CD22*

Synonyms: Leu-14, B-Lymphocyte cell adhesion molecule, BL-CAM, Siglec-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD22	100-01	CHO cells	75.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human sCD22	500-P227	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human sCD22	500-P227BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

sCD23 *soluble CD23***Synonyms:** CD23 antigen, Fc-epsilon-RII, Lymphocyte IgE receptor, BLAST-2**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sCD23	310-26	<i>E.coli</i>	19.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

sCD27 Ligand *soluble CD27 Ligand***Synonyms:** TNFSF7, CD70, CD27L**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sCD27 Ligand	310-30	<i>CHO cells</i>	18.8 kDa	10µg	50µg	1mg

Additional sizes available please inquire

sCD28 Fc *soluble CD28 Fc***Synonyms:** T-cell-specific surface glycoprotein CD28, TP44**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sCD28 Fc	310-34	<i>CHO cells</i>	82.4 kDa	20µg	100µg	1mg

Additional sizes available please inquire

sCD30 Ligand *soluble CD30 Ligand***Synonyms:** TNFSF8, CD153, CD30L**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sCD30 Ligand	450-42	<i>CHO cells</i>	21.3 kDa	10µg	50µg	1mg

Additional sizes available please inquire

sCD34 *soluble CD34***Synonyms:** Hematopoietic progenitor cell antigen CD34**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sCD34	310-31	<i>CHO cells</i>	27.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

sCD40 Ligand *soluble CD40 Ligand*

Synonyms: TNFSF5, TRAP, CD154, Gp39, T-BAM

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD40 Ligand	310-02	<i>E.coli</i>	16.3 kDa	10µg	50µg 1mg
Murine sCD40 Ligand	315-15	<i>E.coli</i>	16.4 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD40 Ligand	AF-310-02	<i>E.coli</i>	16.3 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human sCD40 Ligand	500-P142G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human sCD40 Ligand	500-P142GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human sCD40 Ligand	ABTS CATALOG # 900-K145
--------------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human sCD40 Ligand	ABTS CATALOG # 900-M145
--------------------	--------------------------------

sCD100 *soluble CD100*

Synonyms: Semaphorin-4D, BB18, A8, GR3

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sCD100	310-29	<i>CHO cells</i>	78.9 kDa	5µg	20µg 1mg

Additional sizes available please inquire

CDNF *Cerebral Dopamine Neurotrophic Factor*

Synonyms: ARMETL1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human CDNF	450-05	<i>E.coli</i>	18.5 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Chemerin

Synonyms: Tazarotene-Induced Gene 2 (TIG2), RARRES2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Chemerin	300-66	<i>E.coli</i>	15.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

CNTF *Ciliary Neurotrophic Factor*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CNTF	450-13	<i>E.coli</i>	22.8 kDa	5µg	20µg	1mg
Rat CNTF	450-50	<i>E.coli</i>	22.7 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CNTF	AF-450-13	<i>E.coli</i>	22.8 kDa	5µg	20µg	1mg
Rat CNTF	AF-450-50	<i>E.coli</i>	22.7 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human CNTF	500-P140	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human CNTF	500-P140BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Rat CNTF	500-P79	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Rat CNTF	500-P79BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human CNTF	ABTS CATALOG # 900-K158
Rat CNTF	ABTS CATALOG # 900-K65

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Rat CNTF	ABTS CATALOG # 900-M65
----------	-------------------------------

CRP *C-reactive Protein*

Synonyms: PTX1, pentraxin 1

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human CRP	500-P242	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human CRP	500-P242BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human CRP	500-M50	Mouse	E, WB	500µg

Key: E = ELISA, WB = Western blot

CTACK (CCL27) *Cutaneous T-cell Attracting Chemokine*

Synonyms: ALP, Skinkine, Eskine

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CTACK (CCL27)	300-54	<i>E.coli</i>	10.2 kDa	5µg	20µg	1mg
Murine CTACK (CCL27)	250-26	<i>E.coli</i>	10.9 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human CTACK (CCL27)	500-P294	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human CTACK (CCL27)	500-P294BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human CTACK (CCL27)	ABTS CATALOG # 900-K213
---------------------	-------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human CTACK (CCL27)	ABTS CATALOG # 900-M213
---------------------	-------------------------

CTGF *Connective Tissue Growth Factor*

Synonyms: CCN2, Hypertrophic Chondrocyte-specific protein 24 (HCS24)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CTGF	120-19	<i>E.coli</i>	11.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human CTGF	500-P252	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human CTGF	500-P252BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

CTGF continued on next page...

CTGF *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human CTGF **ABTS CATALOG # 900-K317**

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human CTGF **ABTS CATALOG # 900-M317**

CTGFL/WISP-2 *Connective Tissue Growth Factor-Like Protein*

Synonyms: CCN5, CT-58

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CTGFL/WISP-2	120-16	<i>E.coli</i>	24.3 kDa	5µg	20µg	1mg
<i>Additional sizes available please inquire</i>						

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human CTGFL/WISP-2	500-P212	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human CTGFL/WISP-2	500-P212BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Biot. = Biotinylated				Key: E = ELISA, WB = Western blot		

CTLA-4 Fc

Synonyms: Cytotoxic T-lymphocyte-associated antigen 4, CD152

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CTLA-4 Fc	310-05	<i>CHO cells</i>	78.7 kDa	50µg	200µg	1mg
<i>Additional sizes available please inquire</i>						

CXCL16

Synonyms: SRPSOX

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CXCL16	300-55	<i>E.coli</i>	10.1 kDa	5µg	25µg	1mg
Murine CXCL16	250-28	<i>E.coli</i>	9.9 kDa	5µg	25µg	1mg
<i>Additional sizes available please inquire</i>						

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human CXCL16	500-P200	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human CXCL16	500-P200BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine CXCL16	500-P201G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine CXCL16	500-P201GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Biot. = Biotinylated				Key: E = ELISA, WB = Western blot		

CXCL16 continued on next page...

CXCL16 *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human CXCL16

ABTS CATALOG # 900-K230

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human CXCL16

ABTS CATALOG # 900-M230

CYR61

Synonyms: CCN1, GIGI protein, Cysteine-rich 61

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human CYR61	120-25	<i>E.coli</i>	39.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

C-D

DKK-1, -2, -3 *Dickkopf-related Proteins 1, 2, 3*

Synonyms: DKK-1: Dickkopf-1, SK; DKK-2: Dickkopf-2; DKK-3: Dickkopf-3, REIC

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human DKK-1	120-30	<i>HEK293 cells</i>	25.8 kDa	2µg	10µg	1mg
Human DKK-2	120-45	<i>CHO cells</i>	25.8 kDa	2µg	10µg	1mg
Human DKK-3	120-46	<i>CHO cells</i>	36.3 kDa	2µg	10µg	1mg

Additional sizes available please inquire

sDLL-1 *soluble DLL-1*

Synonyms: Delta-like protein-1, Delta-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sDLL-1	140-08	<i>HEK293 cells</i>	56.3 kDa	5µg	25µg	1mg

Additional sizes available please inquire

sDLL-4 *soluble DLL-4*

Synonyms: Delta-like protein-4, Drosophila Delta homolog 4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sDLL-4	140-07	<i>HEK293 cells</i>	54.3 kDa	5µg	25µg	1mg

Additional sizes available please inquire

sDLL-4 continued on next page...

sDLL-4 *continued...***Polyclonal Antibodies** - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human sDLL-4	500-P279	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human sDLL-4	500-P279BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot, N = Neutralization

EGF *Epidermal Growth Factor***Synonyms:** Urogastrone, URG**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Murine EGF	315-09	<i>E.coli</i>	6.0 kDa	100µg	500µg 1mg
Rat EGF	400-25	<i>E.coli</i>	6.2 kDa	20µg	100µg 1mg

*Additional sizes available please inquire***PeproGMP® Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® Human EGF	GMP100-15-100µg	<i>E.coli</i>	6.2 kDa	100µg
PeproGMP® Human EGF	GMP100-15-500µg	<i>E.coli</i>	6.2 kDa	500µg

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human EGF	AF-100-15	<i>E.coli</i>	6.2 kDa	100µg	500µg 1mg
Murine EGF	AF-315-09	<i>E.coli</i>	6.0 kDa	100µg	500µg 1mg
Rat EGF	AF-400-25	<i>E.coli</i>	6.2 kDa	20µg	100µg 1mg

*Additional sizes available please inquire***Polyclonal Antibodies** - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human EGF	500-P45	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human EGF	500-P45BT	Rabbit	E, WB	25µg	50µg 1mg
Anti-Murine EGF	500-P174G	Goat	E, WB	50µg	100µg 1mg
Biot. Anti-Murine EGF	500-P174GBT	Goat	E, WB	25µg	50µg 1mg
Anti-Rat EGF	500-P277	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Rat EGF	500-P277BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human EGF	ABTS CATALOG # 900-K05
Murine EGF	ABTS CATALOG # 900-K179
Rat EGF	ABTS CATALOG # 900-K390

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human EGF	ABTS CATALOG # 900-M05
Rat EGF	ABTS CATALOG # 900-M390

EGF Receptor (EGFR) *Epidermal Growth Factor Receptor*

Synonyms: ErbB1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human EGF Receptor (EGFR)	100-15R	<i>CHO cells</i>	68.6 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human EGF Receptor (EGFR)	500-P306	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human EGF Receptor (EGFR)	500-P306BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

EGF-L7 *Epidermal Growth Factor-Like Protein 7*

Synonyms: MEGF7, Multiple EGF-like domains protein 7, NOTCH4-like protein, VE-statin, Zneu1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human EGF-L7	100-61	<i>E.coli</i>	27.4 kDa	2µg	10µg 1mg

Additional sizes available please inquire

EG-VEGF *Endocrine Gland-derived Vascular Endothelial Growth Factor*

Synonyms: Prokineticin 1, PROK1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human EG-VEGF	100-44	<i>E.coli</i>	9.6 kDa	5µg	20µg 1mg
Murine EG-VEGF	315-29	<i>E.coli</i>	9.6 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human EG-VEGF	500-P188G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human EG-VEGF	500-P188GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human EG-VEGF	ABTS CATALOG # 900-K244
---------------	--------------------------------

EMAP-II *Endothelial Monocyte-activating Polypeptide II*

Synonyms: EMAP-2, AIMP1, aminoacyl tRNA synthetase complex interacting multifunctional protein 1), Small inducible cytokine subfamily E member 1, Multisynthase complex auxiliary component p43, HLD3, SCYE1

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human EMAP-II	500-P172G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Human EMAP-II	500-P172GBT	Goat	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

ENA-78 (CXCL5) *Epithelial Neutrophil Activating Peptide-78*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human ENA-78 (CXCL5) (5-78 a.a.)	300-22	<i>E.coli</i>	8.0 kDa	5µg	20µg	1mg
Human ENA-78 (CXCL5) (8-78 a.a.)	300-22B	<i>E.coli</i>	7.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human ENA-78 (CXCL5)	500-P91	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human ENA-78 (CXCL5)	500-P91BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Endostatin

Synonyms: COL18A1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Endostatin	150-01	<i>E.coli</i>	20.2 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Endostatin	500-P262	Rabbit	E, WB, N	50µg	100µg	1mg
Biot. Anti-Human Endostatin	500-P262BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Enterokinase

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Enterokinase	450-48C	<i>CHO cells</i>	108.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Enterokinase	AF-450-48C	<i>CHO cells</i>	108.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Eotaxin (CCL11)

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Eotaxin (CCL11)	300-21	<i>E.coli</i>	8.3 kDa	5µg	20µg 1mg
Murine Eotaxin (CCL11)	250-01	<i>E.coli</i>	8.4 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Eotaxin (CCL11)	AF-300-21	<i>E.coli</i>	8.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Eotaxin (CCL11)	500-P41	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Eotaxin (CCL11)	500-P41BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Human Eotaxin (CCL11)	500-P41G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Eotaxin (CCL11)	500-P41GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg
Anti-Murine Eotaxin (CCL11)	500-P67	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine Eotaxin (CCL11)	500-P67BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human Eotaxin (CCL11)	500-M25	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Eotaxin (CCL11)	ABTS CATALOG # 900-K69
Murine Eotaxin (CCL11)	ABTS CATALOG # 900-K68

Eotaxin-2 (CCL24)

Synonyms: MPIF-2, CkB-6

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Eotaxin-2 (CCL24)	300-33	<i>E.coli</i>	8.8 kDa	5µg	20µg 1mg
Murine Eotaxin-2 (CCL24)	250-22	<i>E.coli</i>	10.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Eotaxin-2 continued on next page...

Eotaxin-2 (CCL24) *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Eotaxin-2 (CCL24)	500-P103G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Human Eotaxin-2 (CCL24)	500-P103GBT	Goat	E, WB	25µg	50µg	1mg
Anti-Murine Eotaxin-2 (CCL24)	500-P175G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Murine Eotaxin-2 (CCL24)	500-P175GBT	Goat	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human Eotaxin-2 (CCL24)	500-M31	Mouse	E, WB	500µg

Key: E = ELISA, WB = Western blot

Eotaxin-3 (CCL26)

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Eotaxin-3 (CCL26)	300-48	<i>E.coli</i>	8.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Eotaxin-3 (CCL26)	500-P156G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Human Eotaxin-3 (CCL26)	500-P156GBT	Goat	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human Eotaxin-3 (CCL26)	500-M32	Mouse	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Eotaxin-3 (CCL26)	ABTS CATALOG # 900-K167
-------------------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human Eotaxin-3 (CCL26)	ABTS CATALOG # 900-M167
-------------------------	--------------------------------

Epigen

Synonyms: EPG, Epithelial mitogen

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Epigen	100-51	<i>E.coli</i>	7.9 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Epiregulin

Synonyms: EREG

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Epiregulin	100-04	<i>E.coli</i>	5.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Epiregulin	AF-100-04	<i>E.coli</i>	5.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

EPO

Synonyms: Erythropoietin, Epoetin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human EPO	100-64	<i>CHO cells</i>	18.4 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human EPO	500-P318	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human EPO	500-P318BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

E-Selectin

Synonyms: Endothelial Leukocyte Adhesion Molecule 1 (ELAM1), CD62E, SELE

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human E-Selectin	150-15	<i>CHO cells</i>	58.6 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Exodus-2 (CCL21)

Synonyms: 6Ckine, SLC

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Exodus-2 (CCL21)	300-35	<i>E.coli</i>	12.2 kDa	5µg	20µg	1mg
Murine Exodus-2 (CCL21)	250-13	<i>E.coli</i>	12.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Exodus-2 (CCL21)	500-P109	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human Exodus-2 (CCL21)	500-P109BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine Exodus-2 (CCL21)	500-P114	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine Exodus-2 (CCL21)	500-P114BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Exodus-2 continued on next page...

Exodus-2 (CCL21) *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Murine Exodus-2

ABTS CATALOG # 900-K132

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Murine Exodus-2

ABTS CATALOG # 900-M132

sFas Ligand *soluble Fas Ligand*

Synonyms: sFasL, TNFSF6, CD95L, Apo I Ligand, APTL, APT1LG1, CD178

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sFas Ligand	310-03H	<i>CHO cells</i>	17.9 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sFas Ligand	500-P184G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human sFas Ligand	500-P184GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

E-F

sFas Receptor *soluble Fas Receptor*

Synonyms: sFasR, TNFRSF6, CD95, Fas Antigen, Apo I

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sFas Receptor	310-20	<i>E.coli</i>	17.6 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sFas Receptor	500-P295	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human sFas Receptor	500-P295BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Fetuin A/AHSG

Synonyms: Alpha-2-HS-glycoprotein, Alpha-2-Z-globulin, Ba-alpha-2-glycoprotein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Fetuin A/AHSG	140-13	<i>HEK293 cells</i>	32.9 kDa	10µg	50µg	1mg

Additional sizes available please inquire

FGFs *Fibroblast Growth Factors*

Synonyms: **FGF-acidic:** Fibroblast Growth Factor-acidic, FGF-1, HBGF-1, ECGF-beta; **FGF-basic:** Fibroblast Growth Factor-basic, FGF-2, HBGF-2, Prostatropin; **FGF-4** Fibroblast Growth Factor-4, HST-1, Transforming protein KS3, HBGF-4; **FGF-5:** Fibroblast Growth Factor-5, HBGF-5, Smag-82; **FGF-6:** Fibroblast Growth Factor-6, HBGF-6, HST-2; **FGF-7: (See KGF Page);** **FGF-8a:** Fibroblast Growth Factor-8, FGF-8a, AIGF, HBGF-8; **FGF-8b:** Fibroblast Growth Factor-8, AIGF, HBGF-8; **FGF-9:** Fibroblast Growth Factor-9, GAF (Glia-Activating Factor), HBGF-9; **FGF-10:** Fibroblast Growth Factor-10, FGFA, Keratinocyte Growth Factor-2; **FGF-16:** Fibroblast Growth Factor-16, FGFG; **FGF-17:** Fibroblast Growth Factor-17, FGFH; **FGF-18:** Fibroblast Growth Factor-18, FGFI, zFGF5; **FGF-19:** Fibroblast Growth Factor-19, FGFJ; **FGF-20:** Fibroblast Growth Factor-20, FGFK; **FGF-21:** Fibroblast Growth Factor-21, FGFL; **FGF-23:** Fibroblast Growth Factor-23, FGFN; **FGF-BP-1:** Fibroblast growth factor binding protein 1, FGF-BP, FGF-binding protein 1, HBp17; **FGFR1a:** Fibroblast Growth Factor Receptor 1 alpha, BFGFR; **FGFR2a:** Fibroblast Growth Factor Receptor 2 alpha, BEK, KGFR **FGFR3:** Fibroblast Growth Factor Receptor 3 alpha, ACH, CD333, CEK2, JTK4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human FGF-acidic	100-17A	<i>E.coli</i>	16.8 kDa	10µg	50µg	1mg
Murine FGF-acidic	450-33A	<i>E.coli</i>	15.9 kDa	10µg	50µg	1mg
Rat FGF-acidic	400-29A	<i>E.coli</i>	15.9 kDa	10µg	50µg	1mg
Human FGF-basic (154 a.a.)	100-18B	<i>E.coli</i>	17.2 kDa	10µg	50µg	1mg
Human FGF-basic (146 a.a.)	100-18C	<i>E.coli</i>	16.4 kDa	10µg	50µg	1mg
Murine FGF-basic	450-33	<i>E.coli</i>	16.3 kDa	10µg	50µg	1mg
Rat FGF-basic	400-29	<i>E.coli</i>	16.3 kDa	10µg	50µg	1mg
Human FGF-4	100-31	<i>E.coli</i>	19.7 kDa	5µg	25µg	1mg
Human FGF-5	100-34	<i>E.coli</i>	27.6 kDa	10µg	50µg	1mg
Human FGF-6	100-30	<i>E.coli</i>	18.7 kDa	5µg	25µg	1mg
Human FGF-8a	100-25A	<i>CHO cells</i>	21.2 kDa	5µg	25µg	1mg
Human/Murine FGF-8b	100-25	<i>E.coli</i>	22.5 kDa	5µg	25µg	1mg
Human FGF-9	100-23	<i>E.coli</i>	23.2 kDa	5µg	20µg	1mg
Murine FGF-9	450-30	<i>E.coli</i>	23.3 kDa	2µg	10µg	1mg
Human FGF-10	100-26	<i>E.coli</i>	19.3 kDa	5µg	25µg	1mg
Human FGF-16	100-29	<i>E.coli</i>	23.6 kDa	5µg	25µg	1mg
Human FGF-17	100-27	<i>E.coli</i>	22.7 kDa	5µg	25µg	1mg
Human FGF-18	100-28	<i>E.coli</i>	20.1 kDa	5µg	25µg	1mg
Human FGF-19	100-32	<i>E.coli</i>	21.8 kDa	5µg	25µg	1mg
Human FGF-20	100-41	<i>E.coli</i>	23.2 kDa	3µg	15µg	1mg
Human FGF-21	100-42	<i>E.coli</i>	19.5 kDa	5µg	25µg	1mg
Human FGF-23	100-52	<i>E.coli</i>	22.5 kDa	5µg	20µg	1mg
Murine FGF-23	450-55	<i>E.coli</i>	25.5 kDa	5µg	20µg	1mg
Human FGF-BP-1	100-66	<i>E.coli</i>	23.9 kDa	5µg	25µg	1mg
Human FGFR1a (IIIc) Fc	160-02	<i>CHO cells</i>	65.2 kDa	10µg	50µg	1mg
Human FGFR2a (IIIc) Fc	160-03	<i>CHO cells</i>	65.6 kDa	10µg	50µg	1mg
Human FGFR3 (IIIc) Fc	160-05	<i>CHO cells</i>	128.3 kDa	10µg	50µg	1mg

Additional sizes available please inquire

PeperoGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeperoGMP® Human FGF-basic	GMP100-18B-25µg	<i>E.coli</i>	17.2 kDa	25µg
PeperoGMP® Human FGF-basic	GMP100-18B-100µg	<i>E.coli</i>	17.2 kDa	100µg
PeperoGMP® Human FGF-basic	GMP100-18B-1mg	<i>E.coli</i>	17.2 kDa	1mg

FGFs continued on next page...

FGFs *continued...*

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human FGF-acidic	AF-100-17A	<i>E.coli</i>	16.8 kDa	10µg	50µg	1mg
Human FGF-basic (154 a.a)	AF-100-18B	<i>E.coli</i>	17.2 kDa	10µg	50µg	1mg
Human FGF-basic (146 a.a)	AF-100-18C	<i>E.coli</i>	16.4 kDa	10µg	50µg	1mg
Murine FGF-basic	AF-450-33	<i>E.coli</i>	16.3 kDa	10µg	50µg	1mg
Human FGF-4	AF-100-31	<i>E.coli</i>	19.7 kDa	5µg	25µg	1mg
Human FGF-6	AF-100-30	<i>E.coli</i>	18.7 kDa	5µg	25µg	1mg
Human/Murine FGF-8b	AF-100-25	<i>E.coli</i>	22.5 kDa	5µg	25µg	1mg
Human FGF-9	AF-100-23	<i>E.coli</i>	23.2 kDa	5µg	20µg	1mg
Human FGF-10	AF-100-26	<i>E.coli</i>	19.3 kDa	5µg	25µg	1mg
Human FGF-18	AF-100-28	<i>E.coli</i>	20.1 kDa	5µg	25µg	1mg
Human FGF-19	AF-100-32	<i>E.coli</i>	21.8 kDa	5µg	25µg	1mg
Human FGF-21	AF-100-42	<i>E.coli</i>	19.5 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human FGF-acidic	500-P17	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human FGF-acidic	500-P17BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human FGF-basic	500-P18	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human FGF-basic	500-P18BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human FGF-4	500-P158	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human FGF-4	500-P158BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine FGF-9	500-P66	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine FGF-9	500-P66BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human FGF-10	500-P151G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human FGF-10	500-P151GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Human FGF-16	500-P160G	<i>Goat</i>	WB	50µg	100µg	1mg
Biot. Anti-Human FGF-16	500-P160GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Human FGF-17	500-P152	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human FGF-17	500-P152BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human FGF-17	500-P152G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human FGF-17	500-P152GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human FGF-basic	500-M38	<i>Mouse</i>	E, WB	500µg
Anti-Human FGF-5	500-M40	<i>Mouse</i>	E	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human FGF-basic	ABTS CATALOG # 900-K08
-----------------	------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human FGF-basic	ABTS CATALOG # 900-M08
-----------------	------------------------

Flt3-Ligand

Synonyms: Flt3L, Fms-related tyrosine kinase 3 Ligand

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Flt3-Ligand	300-19	<i>E.coli</i>	17.6 kDa	2µg	10µg 1mg
Murine Flt3-Ligand	250-31L	<i>E.coli</i>	18.6 kDa	2µg	10µg 1mg

*See page 12 for Cytokine Packages

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® Human Flt3-Ligand	GMP300-19-50µg	<i>E.coli</i>	17.6 kDa	50µg
PeproGMP® Human Flt3-Ligand	GMP300-19-100µg	<i>E.coli</i>	17.6 kDa	100µg

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Flt3-Ligand	AF-300-19	<i>E.coli</i>	17.6 kDa	2µg	10µg 1mg

*See page 12 for Cytokine Packages

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Flt3-Ligand	500-P42	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Flt3-Ligand	500-P42BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Follistatin

Synonyms: FS, Activin-binding protein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Follistatin	120-13	<i>E.coli</i>	31.5 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Follistatin	500-P207	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Follistatin	500-P207BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Follistatin	ABTS CATALOG # 900-K299
-------------------	-------------------------

Fractalkine (CX3CL1)

Synonyms: Neurotactin, FKN

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Fractalkine (CX3CL1)	300-31	<i>E.coli</i>	8.5 kDa	5µg	20µg 1mg
Rat Fractalkine (CX3CL1)	400-26	<i>E.coli</i>	8.7 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Fractalkine (CX3CL1)	500-P98	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Fractalkine (CX3CL1)	500-P98BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

sFRP-1 Secreted Frizzled Related Protein-1

Synonyms: Secreted Apoptosis Related Protein-2, SARP-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sFRP-1	120-29	<i>HeLa cells</i>	32.5 kDa	5µg	20µg 1mg

Additional sizes available please inquire

sFRP-4 Secreted Frizzled Related Protein-4

Synonyms: DDC-4 (rat homologue)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sFRP-4	120-50	<i>CHO cells</i>	37.8 kDa	5µg	25µg 1mg

Additional sizes available please inquire

FSTL1

Synonyms: Follistatin-like protein 1, FSL1, Follistatin-related protein 1, FRP, OCC1, OCC-1, TGF-β1-simulated clone 36, TSC-36

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human FSTL1	120-51	<i>CHO cells</i>	32.7 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Furin

Synonyms: FUR, PACE, PCSK3

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Furin CARTAGENA	450-47	<i>Insect cells</i>	63.9 kDa	2µg	10µg 1mg

Additional sizes available please inquire

gAcrp30

Synonyms: Adipolean (human), APM-1, APM-1 variant, gad, globular domaine of Acrp30

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human gAcrp30/Adipolean	450-21	<i>E.coli</i>	16.6 kDa	5µg	25µg	1mg
Murine gAcrp30	450-27	<i>E.coli</i>	16.6 kDa	5µg	25µg	1mg
Human gAcrp30/Adipolean Variant	450-20	<i>E.coli</i>	18.1 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human gAcrp30/Adipolean	500-P193G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human gAcrp30/Adipolean	500-P193GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Human gAcrp30/Adipolean Variant	500-P205	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human gAcrp30/Adipolean Variant	500-P205BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Galectin-1

Synonyms: Galactose-specific lectin-1, Beta-galactoside-binding lectin L-14-I, Galaptin, 14 kDa lectin, S-LAC lectin-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Galectin-1	450-39	<i>E.coli</i>	14.5 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Galectin-1	500-P210	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human Galectin-1	500-P210BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Galectin-3

Synonyms: Galactose-specific lectin-3, IgE-binding protein, MAC2, L-29, CPB-35

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Galectin-3	450-38	<i>E.coli</i>	26.0 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Galectin-3	500-P246	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human Galectin-3	500-P246BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

GASP-1

Synonyms: GDF-Associated Serum Protein-1, GASP, KIAA0443, WFIKKNRP

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GASP-1	120-41	<i>CHO cells</i>	59.9 kDa	5µg	25µg	1mg

Additional sizes available please inquire

GCP-2 (CXCL6)/LIX (CXCL6) *Granulocyte Chemotactic Protein-2*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GCP-2 (CXCL6)	300-41	<i>E.coli</i>	7.9 kDa	5µg	20µg	1mg
Murine LIX (CXCL6) (92 a.a.)	250-17	<i>E.coli</i>	9.8 kDa	5µg	20µg	1mg
Murine LIX (CXCL6) (70 a.a.)	250-36	<i>E.coli</i>	7.6 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human GCP-2 (CXCL6)	500-P120	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human GCP-2 (CXCL6)	500-P120BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine LIX (CXCL6)	500-P146	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine LIX (CXCL6)	500-P146BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

G-CSF *Granulocyte Colony-Stimulating Factor*

Synonyms: CSF-3, MGI-1G, GM-CSFβ, pluripoietin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human G-CSF	300-23	<i>E.coli</i>	18.7 kDa	2µg	10µg	1mg
Murine G-CSF	250-05	<i>E.coli</i>	19.0 kDa	2µg	10µg	1mg
Rat G-CSF	400-37	<i>E.coli</i>	21.6 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human G-CSF	AF-300-23	<i>E.coli</i>	18.7 kDa	2µg	10µg	1mg
Murine G-CSF	AF-250-05	<i>E.coli</i>	19.0 kDa	2µg	10µg	1mg

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human G-CSF	500-P43	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human G-CSF	500-P43BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine G-CSF	500-P69	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine G-CSF	500-P69BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

G-CSF continued on next page...

G-CSF *Granulocyte Colony-Stimulating Factor*

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human G-CSF	500-M37	Mouse	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human G-CSF	ABTS CATALOG # 900-K77
Murine G-CSF	ABTS CATALOG # 900-K103

GDF-2 *Growth/Differentiation Factor-2*

Synonyms: BMP-9

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDF-2	120-07	CHO cells	24.1 kDa	2µg	10µg	1mg
Additional sizes available please inquire						

G

GDF-3 *Growth/Differentiation Factor-3*

Synonyms: Vgr-2, UNQ2222/PRO248

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDF-3	120-22	<i>E.coli</i>	26.0 kDa	5µg	20µg	1mg
Additional sizes available please inquire						

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDF-3	AF-120-22	<i>E.coli</i>	26.0 kDa	5µg	20µg	1mg

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human GDF-3	500-P235	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human GDF-3	500-P235BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Biot. = Biotinylated				Key: E = ELISA, WB = Western blot		

GDF-5 (BMP-14/CDMP-1) *Growth/Differentiation Factor-5*

Synonyms: Bone Morphogenetic Protein-14, Cartilage-Derived Morphogenetic Protein-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDF-5 (BMP-14/CDMP-1)	120-01	<i>E.coli</i>	27.0 kDa	10µg	50µg	1mg
Murine GDF-5 (BMP-14/CDMP-1)	315-24	<i>E.coli</i>	27.0 kDa	10µg	50µg	1mg

Additional sizes available please inquire

GDF-7 *Growth/Differentiation Factor-7*

Synonyms: BMP-12

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDF-7	120-37	<i>E.coli</i>	28.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

GDF-11 *Growth/Differentiation Factor-11*

Synonyms: BMP-11

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat GDF-11	120-11	<i>E.coli</i>	25.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

GDF-15/MIC-1 *Growth/Differentiation Factor-15*

Synonyms: Placental TGF-β, Prostate Differentiation Factor (PDF), Macrophage Inhibitory Cytokine 1, MIC-1, PLAB, NRG-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDF-15/MIC-1	120-28	<i>cell culture</i>	24.6 kDa	5µg	20µg	1mg

Additional sizes available please inquire

GNDF *Glial-Derived Neurotrophic Factor*

Synonyms: ATF-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDNF	450-10	<i>E.coli</i>	30.4 kDa	2µg	10µg	1mg
Murine GDNF	450-44	<i>E.coli</i>	30.2 kDa	2µg	10µg	1mg
Rat GDNF	450-51	<i>E.coli</i>	30.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GDNF	AF-450-10	<i>E.coli</i>	30.4 kDa	2µg	10µg	1mg
Murine GDNF	AF-450-44	<i>E.coli</i>	30.2 kDa	2µg	10µg	1mg
Rat GDNF	AF-450-51	<i>E.coli</i>	30.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human GDNF	500-P81	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human GDNF	500-P81BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

GLP-1 *Glucagon-Like Peptide 1*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human GLP-1	130-08	<i>E.coli</i>	3.3 kDa	200µg	1mg 5mg

Additional sizes available please inquire

Glu-C

Synonyms: V8 Protease

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Staphylococcus Glu-C	450-46	<i>E.coli</i>	28.8 kDa	50µg	250µg 1mg

Additional sizes available please inquire

GM-CSF *Granulocyte-Macrophage Colony-Stimulating Factor*

Synonyms: CSF-2, MGI-1GM, Pluripoietin-α

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human GM-CSF	300-03	<i>E.coli</i>	14.6 kDa	5µg	20µg 1mg
Murine GM-CSF	315-03	<i>E.coli</i>	14.2 kDa	5µg	20µg 1mg
Rat GM-CSF	400-23	<i>E.coli</i>	14.5 kDa	5µg	20µg 1mg

** See page 12 for available Cytokine Packages.*

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human GM-CSF	AF-300-03	<i>E.coli</i>	14.6 kDa	5µg	20µg 1mg
Murine GM-CSF	AF-315-03	<i>E.coli</i>	14.2 kDa	5µg	20µg 1mg
Rat GM-CSF	AF-400-23	<i>E.coli</i>	14.5 kDa	5µg	20µg 1mg

** See page 12 for available Cytokine Packages.*

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human GM-CSF	500-P33	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human GM-CSF	500-P33BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Murine GM-CSF	500-P65	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine GM-CSF	500-P65BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Rat GM-CSF	500-P225	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Rat GM-CSF	500-P225BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human GM-CSF	ABTS CATALOG # 900-K30
Murine GM-CSF	ABTS CATALOG # 900-K55

GM-CSF continued on next page...

GM-CSF *continued...*

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human GM-CSF	ABTS CATALOG # 900-M30
Murine GM-CSF	ABTS CATALOG # 900-M55

GMF- β *Glial Maturation Factor beta*

Synonyms: GMFB

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GMF- β	450-37	<i>E.coli</i>	16.5 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

GPR15L

Synonyms: Antimicrobial peptide-57, AP-57, Colon-derived SUS2 binding factor, CSBF, UNQ1833/PRO3446

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GPR15L	300-71	<i>E.coli</i>	6.5 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

G

Granzyme B

Synonyms: Cytotoxic Cell Protease 1 (CCP1)

RUO Cytokines

PRODUCT		CATALOG #	SOURCE	MW	Size A	Size B	
Murine Granzyme B	CARTAGENA	140-03	<i>Baculovirus</i>	28.9 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Gremlin-1

Synonyms: CKTSF1B1, DAND2, DRM, IHG-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Gremlin-1	120-42	<i>CHO cells</i>	18.3 kDa	10 μ g	50 μ g	1mg

Additional sizes available please inquire

GRO- α , - β , - γ (CXCL1-3) Growth Regulated Proteins

Synonyms: GRO- α /MGSA/KC: GRO1, Melanoma Growth Stimulatory Activity α , MGSA α , NAP-3, CINC (rat)

GRO- β /MIP-2: GRO2, Melanoma Growth Stimulatory Activity β , MGSA β , MIP-2 α

GRO- γ : GRO3, Melanoma Growth Stimulatory Activity γ , MGSA γ , MIP-2 β

MIP-2: Macrophage Inflammatory Protein-2

Ruo Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GRO- α /MGSA (CXCL1)	300-11	<i>E.coli</i>	7.8 kDa	5 μ g	25 μ g	1mg
Murine KC (CXCL1)	250-11	<i>E.coli</i>	7.8 kDa	5 μ g	20 μ g	1mg
Rat GRO/KC (CXCL1)	400-10	<i>E.coli</i>	7.8 kDa	5 μ g	25 μ g	1mg
Human GRO- β (CXCL2)	300-39	<i>E.coli</i>	7.9 kDa	2 μ g	10 μ g	1mg
Murine MIP-2 (CXCL2)	250-15	<i>E.coli</i>	7.8 kDa	5 μ g	20 μ g	1mg
Rat GRO- β /MIP-2 (CXCL2)	400-11	<i>E.coli</i>	7.9 kDa	5 μ g	25 μ g	1mg
Viral MIP-2	350-03	<i>E.coli</i>	7.9 kDa	10 μ g	50 μ g	1mg
Human GRO- γ (CXCL3)	300-40	<i>E.coli</i>	7.9 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human GRO- α /MGSA (CXCL1)	AF-300-11	<i>E.coli</i>	7.8 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human GRO- α /MGSA (CXCL1)	500-P92	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human GRO- α /MGSA (CXCL1)	500-P92BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine KC (CXCL1)	500-P115	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine KC (CXCL1)	500-P115BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat GRO/KC (CXCL1)	500-P74	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat GRO/KC (CXCL1)	500-P74BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Human GRO- β (CXCL2)	500-P104	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human GRO- β (CXCL2)	500-P104BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine MIP-2 (CXCL2)	500-P130	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine MIP-2 (CXCL2)	500-P130BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat GRO- β /MIP-2 (CXCL2)	500-P75	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat GRO- β /MIP-2 (CXCL2)	500-P75BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Human GRO- γ (CXCL3)	500-P105	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human GRO- γ (CXCL3)	500-P105BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human GRO- α /MGSA (CXCL1)	ABTS CATALOG # 900-K38
Human GRO- β (CXCL2)	ABTS CATALOG # 900-K120
Rat GRO/KC (CXCL1)	ABTS CATALOG # 900-K57
Murine KC (CXCL1)	ABTS CATALOG # 900-K127
Murine MIP-2 (CXCL2)	ABTS CATALOG # 900-K152

GRO- α , - β , - γ continued on next page...

GRO- α , - β , - γ (CXCL1-3) *continued...*

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human GRO- α /MGSA (CXCL1)	ABTS CATALOG # 900-M38
Human GRO- β (CXCL2)	ABTS CATALOG # 900-M120
Murine KC (CXCL1)	ABTS CATALOG # 900-M127
Murine MIP-2 (CXCL2)	ABTS CATALOG # 900-M152

Growth Hormone

Synonyms: Somatotropin, GH, GH-N, Growth Hormone 1, Pituitary growth hormone

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Growth Hormone	100-40	<i>E.coli</i>	22.3 kDa	10 μ g	50 μ g 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Growth Hormone	AF-100-40	<i>E.coli</i>	22.3 kDa	10 μ g	50 μ g 1mg

Additional sizes available please inquire

G-H

HB-EGF *Heparin-Binding EGF-like Growth Factor*

Synonyms: HBEGF, Diphtheria Toxin Receptor (DTR)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human HB-EGF	100-47	<i>E.coli</i>	9.7 kDa	10 μ g	50 μ g 1mg
Murine HB-EGF	315-35	<i>E.coli</i>	9.8 kDa	10 μ g	50 μ g 1mg

Additional sizes available please inquire

HCC-1(CCL14) *Hemofiltrate CC Chemokine-1*

Synonyms: HCC-1/HCC-3, NCC-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human HCC-1 (CCL14) (66 a.a.)	300-38B	<i>E.coli</i>	7.8 kDa	2 μ g	10 μ g 1mg
Human HCC-1 (CCL14) (72 a.a.)	300-38	<i>E.coli</i>	8.4 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human HCC-1 (CCL14)	500-P106	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human HCC-1 (CCL14)	500-P106BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Heregulin β -1

Synonyms: HRG, Neuregulin1 (NRG1- β 1), HRG1- β 1, Breast cancer cell differentiation factor p45, ARIA (Acetylcholine Receptor Inducing Activity), glial growth factor, Neu differentiation factor (rat)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Heregulin β -1	100-03	<i>E.coli</i>	7.5 kDa	10 μ g	50 μ g 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Heregulin β -1	AF-100-03	<i>E.coli</i>	7.5 kDa	10 μ g	50 μ g 1mg

Additional sizes available please inquire

PeperoGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeperoGMP® Heregulin β -1	GMP100-03-50 μ g	<i>E.coli</i>	7.5 kDa	50 μ g
PeperoGMP® Heregulin β -1	GMP100-03-100 μ g	<i>E.coli</i>	7.5 kDa	100 μ g

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Heregulin β -1	500-P288	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human Heregulin β -1	500-P288BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Heregulin β -1	ABTS CATALOG # 900-K316
----------------------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human Heregulin β -1	ABTS CATALOG # 900-M316
----------------------------	--------------------------------

HGF *Hepatocyte Growth Factor*

Synonyms: Scatter Factor (SF), Hepatopoietin (HPTA)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human HGF CARTAGENA	100-39	<i>Insect cells</i>	80.0 kDa	2 μ g	10 μ g 1mg
Human HGF	100-39H	<i>HEK293 cells</i>	79.4 kDa	5 μ g	25 μ g 1mg
Murine HGF CARTAGENA	315-23	<i>Insect cells</i>	79.3 kDa	5 μ g	20 μ g 1mg

Additional sizes available please inquire

HPRG *Histidine-Proline-Rich Glycoprotein*

Synonyms: Histidine-rich glycoprotein (HRG), HRGP, THPH11

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human HPRG	100-60	<i>CHO cells</i>	57.7 kDa	5 μ g	25 μ g 1mg

Additional sizes available please inquire

HVEM-Fc

Synonyms: TNFSFR14, HVEM, ATAR, TR2, HveA, CD270

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human HVEM-Fc	CARTAGENA	310-27	<i>Insect cells</i>	41.4 kDa	20µg	100µg 1mg

Additional sizes available please inquire

I-309 (CCL1)

Synonyms: TCA-3

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human I-309 (CCL1)	300-37	<i>E.coli</i>	8.5 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human I-309 (CCL1)	500-P110	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human I-309 (CCL1)	500-P110BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

ICAM-1 *Intercellular Adhesion Molecule 1*

Synonyms: Major group rhinovirus receptor, CD54 antigen

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human ICAM-1	150-05	<i>CHO cells</i>	49.5 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human ICAM-1	500-P287	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human ICAM-1	500-P287BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human ICAM-1	ABTS CATALOG # 900-K464
--------------	-------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human ICAM-1	ABTS CATALOG # 900-M464
--------------	-------------------------

H-I

ICOS Fc

Synonyms: Inducible T-cell costimulator, CD278, Activation-inducible lymphocyte immunomediatory molecule (AILIM), CRP-1, CVID1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ICOS Fc	310-39	<i>CHO cells</i>	42.0 kDa	10µg	50µg 1mg

Additional sizes available please inquire

IFN-β Interferon-beta

Synonyms: Fibroblast Interferon, IFNB1, Type I interferon

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IFN-β	300-02BC	<i>CHO cells</i>	20.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IFN-β	AF-300-02B	<i>E.coli</i>	20.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IFN-β	500-P32B	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IFN-β	500-P32BBT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IFN-γ Interferon-gamma

Synonyms: Immune Interferon, Type II interferon, T-cell interferon, MAF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IFN-γ	300-02	<i>E.coli</i>	16.8 kDa	20µg	100µg 1mg
Murine IFN-γ	315-05	<i>E.coli</i>	15.6 kDa	20µg	100µg 1mg
Rat IFN-γ	400-20	<i>E.coli</i>	15.6 kDa	20µg	100µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IFN-γ	AF-300-02	<i>E.coli</i>	16.8 kDa	20µg	100µg 1mg
Murine IFN-γ	AF-315-05	<i>E.coli</i>	15.6 kDa	20µg	100µg 1mg

Additional sizes available please inquire

IFN-γ continued on next page...

IFN- γ *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IFN- γ	500-P32	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IFN- γ	500-P32BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IFN- γ	500-P119	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IFN- γ	500-P119BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IFN- γ	500-P122	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IFN- γ	500-P122BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IFN- γ	500-P122G	<i>Goat</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IFN- γ	500-P122GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-human IFN- γ	500-M90	<i>Mouse</i>	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IFN- γ	ABTS CATALOG # 900-K27
Human IFN- γ	TMB CATALOG # 900-T27
Murine IFN- γ	ABTS CATALOG # 900-K98
Murine IFN- γ	TMB CATALOG # 900-T98
Rat IFN- γ	ABTS CATALOG # 900-K109

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IFN- γ	ABTS CATALOG # 900-M27
Human IFN- γ	TMB CATALOG # 900-TM27
Murine IFN- γ	ABTS CATALOG # 900-M98
Murine IFN- γ	TMB CATALOG # 900-TM98
Rat IFN- γ	ABTS CATALOG # 900-M109

IFN- λ 1, - λ 2 *Interferon-lambda 1, 2*

Synonyms: IFN- λ 1: IL-29; IFN- λ 2: IL-28A

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IFN- λ 1	300-02L	<i>E.coli</i>	19.8 kDa	5 μ g	20 μ g	1mg
Human IFN- λ 2	300-02K	<i>E.coli</i>	19.6 kDa	5 μ g	20 μ g	1mg
Murine IFN- λ 2	250-33	<i>E.coli</i>	19.8 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IFN- λ 1	AF-300-02L	<i>E.coli</i>	19.8 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

IFN- λ 1, - λ 2 continued on next page...

IFN- λ 1, - λ 2 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IFN- λ 2	500-P247	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IFN- λ 2	500-P247BT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IFN- ω *Interferon-omega*

Synonyms: IFN alpha II-1, IFNW1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IFN- ω	300-02J	<i>E.coli</i>	19.9 kDa	20 μ g	100 μ g	1mg

Additional sizes available please inquire

IGF-I, IGF-I LR3, IGF-II *Insulin-like Growth Factors I, II*

Synonyms: **IGF-I:** Somatamedin C, IGF-IA; **IGF-I LR3:** Long R3 IGF-I, Somatamedin C, IGF-IA **IGF-II:** Somatamedin A

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IGF-I	100-11	<i>E.coli</i>	7.6 kDa	100 μ g	500 μ g	1mg
Murine IGF-I	250-19	<i>E.coli</i>	7.6 kDa	10 μ g	50 μ g	1mg
Human IGF-I LR3	100-11R3	<i>E.coli</i>	9.1 kDa	200 μ g	1mg	1mg
Human IGF-II	100-12	<i>E.coli</i>	7.5 kDa	10 μ g	50 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IGF-I	AF-100-11	<i>E.coli</i>	7.6 kDa	100 μ g	500 μ g	1mg
Human IGF-I LR3	AF-100-11R3	<i>E.coli</i>	9.1 kDa	200 μ g	1mg	1mg
Human IGF-II	AF-100-12	<i>E.coli</i>	7.5 kDa	10 μ g	50 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IGF-I	500-P11	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IGF-I	500-P11BT	Rabbit	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IGF-I	500-P157G	Goat	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IGF-I	500-P157GBT	Goat	E, WB	25 μ g	50 μ g	1mg
Anti-Human IGF-II	500-P12	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IGF-II	500-P12BT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Murine IGF-I	ABTS CATALOG # 900-K170
--------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells

Murine IGF-I	ABTS CATALOG # 900-M170
--------------	--------------------------------

IGF-BPs *Insulin-like Growth Factor-Binding Proteins*

Synonyms: **IGF-BP1:** IBP-1, Placenta Protein 12 (PP12); **IGF-BP2:** IBP-2; **IGF-BP3:** IBP-3, Growth-hormone-dependent binding protein; **IGF-BP4:** IBP-4, HT29-IGF-BP, colon cancer cell growth inhibitor; **IGF-BP5:** IBP-5; **IGF-BP6:** IBP-6; **IGF-BP7:** IBP-7, Mac25, IGF binding protein-related protein-1 (IGFBP-rP1)

RUO Cytokines

PRODUCT		CATALOG #	SOURCE	MW	Size A	Size B	
Human IGF-BP1		350-10	<i>E.coli</i>	25.4 kDa	5µg	25µg	1mg
Human IGF-BP2	CARTAGENA	350-06B	<i>Insect cells</i>	31.5 kDa	5µg	20µg	1mg
Human IGF-BP3		100-08	<i>E.coli</i>	28.8 kDa	5µg	25µg	1mg
Human IGF-BP4	CARTAGENA	350-05B	<i>Insect cells</i>	25.7kDa	5µg	20µg	1mg
Human IGF-BP5		100-05	<i>E.coli</i>	28.6 kDa	5µg	25µg	1mg
Human IGF-BP6	CARTAGENA	350-07B	<i>Insect cells</i>	22.3 kDa	5µg	20µg	1mg
Human IGF-BP7		350-09	<i>E.coli</i>	26.4 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT		CATALOG #	SOURCE	MW	Size A	Size B	
Human IGF-BP3		AF-100-08	<i>E.coli</i>	28.8 kDa	5µg	25µg	1mg
Human IGF-BP7		AF-350-09	<i>E.coli</i>	26.4 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT		CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IGF-BP1		500-P228	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IGF-BP1		500-P228BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human IGF-BP3		500-P230	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IGF-BP3		500-P230BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human IGF-BP5		500-P232	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IGF-BP5		500-P232BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human IGF-BP7		500-P234	<i>Rabbit</i>	IE, WB	50µg	100µg	1mg
Biot. Anti-Human IGF-BP7		500-P234BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IGF-BP1	ABTS CATALOG # 900-K315
---------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells

Human IGF-BP1	ABTS CATALOG # 900-M315
---------------	--------------------------------

IL-1 α Interleukin-1 alpha

Synonyms: Hematopoietin-1, Lymphocyte-Activating Factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-1 α	200-01A	<i>E.coli</i>	18.0 kDa	2 μ g	10 μ g	1mg
Murine IL-1 α	211-11A	<i>E.coli</i>	17.9 kDa	2 μ g	10 μ g	1mg
Rat IL-1 α	400-01A	<i>E.coli</i>	17.7 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-1 α	AF-200-01A	<i>E.coli</i>	18.0 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-1 α	500-P21A	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-1 α	500-P21ABT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IL-1 α	500-P51A	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IL-1 α	500-P51ABT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IL-1 α	500-P180G	<i>Goat</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IL-1 α	500-P180GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-1 α	ABTS CATALOG # 900-K11
Human IL-1 α	TMB CATALOG # 900-T11
Murine IL-1 α	ABTS CATALOG # 900-K82
Rat IL-1 α	ABTS CATALOG # 900-K204

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells

Human IL-1 α	ABTS CATALOG # 900-M11
Human IL-1 α	TMB CATALOG # 900-TM11
Murine IL-1 α	ABTS CATALOG # 900-M82

IL-1 β Interleukin-1 beta

Synonyms: Catabolin, Lymphocyte-Activating Factor (LAF), Endogenous Pyrogen (EP), Leukocyte Endogenous Mediator (LEM), Mononuclear Cell Factor (MCF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-1 β	200-01B	<i>E.coli</i>	17.3 kDa	2 μ g	10 μ g 1mg
Murine IL-1 β	211-11B	<i>E.coli</i>	17.5 kDa	2 μ g	10 μ g 1mg
Rat IL-1 β	400-01B	<i>E.coli</i>	17.4 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-1 β	AF-200-01B	<i>E.coli</i>	17.3 kDa	2 μ g	10 μ g 1mg
Murine IL-1 β	AF-211-11B	<i>E.coli</i>	17.5 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-1 β	500-P21BG	<i>Goat</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human IL-1 β	500-P21BGBT	<i>Goat</i>	E, WB	25 μ g	50 μ g 1mg
Anti-Murine IL-1 β	500-P51	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Murine IL-1 β	500-P51BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg
Anti-Rat IL-1 β	500-P80	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Rat IL-1 β	500-P80BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-1 β	500-M01B	<i>Mouse</i>	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-1 β	ABTS CATALOG # 900-K95
Human IL-1 β	TMB CATALOG # 900-T95
Murine IL-1 β	ABTS CATALOG # 900-K47
Rat IL-1 β	ABTS CATALOG # 900-K91

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells

Human IL-1 β	ABTS CATALOG # 900-M95
Human IL-1 β	TMB CATALOG # 900-TM95
Murine IL-1 β	ABTS CATALOG # 900-M47
Rat IL-1 β	ABTS CATALOG # 900-M91

IL-1RA *Interleukin-1 Receptor Antagonist*

Synonyms: ICIL-1RA, IRAP, IL-1RN

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-1RA	200-01RA	<i>E.coli</i>	17.2 kDa	20µg	100µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-1RA	AF-200-01RA	<i>E.coli</i>	17.2 kDa	20µg	100µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-1RA	500-P209	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-1RA	500-P209BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-1RA	ABTS CATALOG # 900-K474
--------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-1RA	ABTS CATALOG # 900-M474
--------------	--------------------------------

IL-2 *Interleukin-2*

Synonyms: T-cell Growth Factor (TCGF), Aldesleukin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-2	200-02	<i>E.coli</i>	15.5 kDa	10µg	50µg 1mg
Murine IL-2	212-12	<i>E.coli</i>	17.2 kDa	5µg	20µg 1mg
Rat IL-2	400-02	<i>E.coli</i>	15.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-2	AF-200-02	<i>E.coli</i>	15.5 kDa	10µg	50µg 1mg
Murine IL-2	AF-212-12	<i>E.coli</i>	17.2 kDa	5µg	20µg 1mg
Rat IL-2	AF-400-02	<i>E.coli</i>	15.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® Human IL-2	GMP200-02-50µg	<i>E.coli</i>	15.5 kDa	50µg
PeproGMP® Human IL-2	GMP200-02-100µg	<i>E.coli</i>	15.5 kDa	100µg
PeproGMP® Human IL-2	GMP200-02-1mg	<i>E.coli</i>	15.5 kDa	1mg

IL-2 continued on next page...

IL-2 *continued...***Polyclonal Antibodies** - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	1mg
Anti-Human IL-2	500-P22	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-2	500-P22BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human IL-2	500-P22G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-2	500-P22GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Murine IL-2	500-P111	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-2	500-P111BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Rat IL-2	500-P274	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Rat IL-2	500-P274BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-2	500-M02	<i>Mouse</i>	E, WB	500µg
Anti-Murine IL-2	500-M127	<i>Rat</i>	E, WB	500µg
Anti-Rat IL-2	500-M129	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-2	ABTS CATALOG # 900-K12
Human IL-2	TMB CATALOG # 900-T12
Murine IL-2	ABTS CATALOG # 900-K108
Murine IL-2	TMB CATALOG # 900-T108
Rat IL-2	ABTS CATALOG # 900-K205

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-2	ABTS CATALOG # 900-M12
Human IL-2	TMB CATALOG # 900-TM12
Murine IL-2	ABTS CATALOG # 900-M108
Murine IL-2	TMB CATALOG # 900-TM108
Rat IL-2	ABTS CATALOG # 900-M205

sIL-2 Receptor α *soluble Interleukin-2 Receptor alpha***Synonyms:** soluble Interleukin-2R α , TAC-antigen, CD25 antigen**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sIL-2 Receptor α	CARTAGENA 200-02R	<i>Insect cells</i>	24.8 kDa	5µg	25µg	1mg
Human sIL-2 Receptor α	200-02RC	<i>CHO cells</i>	24.8 kDa	5µg	25µg	1mg

Additional sizes available please inquire

sIL-2 Receptor α continued on next page...

sIL-2 Receptor α *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sIL-2 Receptor α	500-P22R	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human sIL-2 Receptor α	500-P22RBT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human sIL-2 Receptor α	500-M02R	Mouse	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

IL-3/IL-3 β *Interleukin-3/ Interleukin-3 beta*

Synonyms: Mast Cell Growth Factor (MCGF), Multi-CSF, HCGF, P-cell stimulation factor

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-3	200-03	<i>E.coli</i>	15.0 kDa	2 μ g	10 μ g	1mg
Murine IL-3	213-13	<i>E.coli</i>	15.1 kDa	2 μ g	10 μ g	1mg
Rat IL-3 β	400-03	<i>E.coli</i>	16.3 kDa	5 μ g	20 μ g	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® Human IL-3	GMP200-03-50 μ g	<i>E.coli</i>	15.0 kDa	50 μ g
PeproGMP® Human IL-3	GMP200-03-100 μ g	<i>E.coli</i>	15.0 kDa	100 μ g

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-3	AF-200-03	<i>E.coli</i>	15.0 kDa	2 μ g	10 μ g	1mg
Murine IL-3	AF-213-13	<i>E.coli</i>	15.1 kDa	2 μ g	10 μ g	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	1mg
Anti-Human IL-3	500-P23	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-3	500-P23BT	Rabbit	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IL-3	500-P53	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IL-3	500-P53BT	Rabbit	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IL-3 β	500-P177G	Goat	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IL-3 β	500-P177GBT	Goat	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-3	500-M03	Mouse	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

IL-3/IL-3 β continued on next page...

IL-3/IL-3 β *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-3	ABTS CATALOG # 900-K13
Murine IL-3	ABTS CATALOG # 900-K48

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Murine IL-3	ABTS CATALOG # 900-M48
-------------	-------------------------------

IL-4 *Interleukin-4*

Synonyms: BCGF, BCDF, B-cell Stimulating Factor (BSF-1)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-4	200-04	<i>E.coli</i>	15.1 kDa	5 μ g	20 μ g	1mg
Murine IL-4	214-14	<i>E.coli</i>	13.5 kDa	5 μ g	20 μ g	1mg
Rat IL-4	400-04	<i>E.coli</i>	14.0 kDa	5 μ g	20 μ g	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-4	AF-200-04	<i>E.coli</i>	15.1 kDa	5 μ g	20 μ g	1mg
Murine IL-4	AF-214-14	<i>E.coli</i>	13.5 kDa	5 μ g	20 μ g	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-4	500-P24	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-4	500-P24BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IL-4	500-P54	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IL-4	500-P54BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IL-4	500-P94	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IL-4	500-P94BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-4	500-M04	<i>Mouse</i>	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-4	ABTS CATALOG # 900-K14
Human IL-4	TMB CATALOG # 900-T14
Murine IL-4	ABTS CATALOG # 900-K49
Murine IL-4	TMB CATALOG # 900-T49

IL-4 continued on next page...

IL-4 *continued...*

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-4	ABTS CATALOG # 900-M14
Human IL-4	TMB CATALOG # 900-TM14
Murine IL-4	ABTS CATALOG # 900-M49
Murine IL-4	TMB CATALOG # 900-TM49

sIL-4 Receptor α *soluble Interleukin-4 Receptor alpha*

Synonyms: soluble Interleukin-4R α , CD124

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sIL-4 Receptor α	200-04R	HEK293 cells	23.9 kDa	3 μ g	15 μ g	1mg
Human sIL-4 Receptor α	200-04RC	CHO cells	23.9 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sIL-4 Receptor α	500-P325	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human sIL-4 Receptor α	500-P325BT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-5 *Interleukin-5*

Synonyms: EDF, BCDFII, TRF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-5	200-05	<i>E.coli</i>	26.5 kDa	2 μ g	10 μ g	1mg
Murine IL-5	215-15	<i>E.coli</i>	26.2 kDa	5 μ g	25 μ g	1mg
Rat IL-5	400-05	<i>E.coli</i>	26.0 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-5	AF-200-05	<i>E.coli</i>	26.5 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-5	500-P25	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-5	500-P25BT	Rabbit	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IL-5	500-P55	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IL-5	500-P55BT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-5 continued on next page...

IL-5 *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-5	ABTS CATALOG # 900-K15
Murine IL-5	ABTS CATALOG # 900-K406

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-5	ABTS CATALOG # 900-M15
Murine IL-5	ABTS CATALOG # 900-M406

IL-6 *Interleukin-6*

Synonyms: 26 kDa protein, IFN- β 2, B-Cell Differentiation Factor (BCDF), B-cell Stimulatory Factor-2, BSF-2, HPGF, HSF, MGI-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-6	200-06	<i>E.coli</i>	20.9 kDa	5 μ g	20 μ g	1mg
Murine IL-6	216-16	<i>E.coli</i>	21.7 kDa	2 μ g	10 μ g	1mg
Rat IL-6	400-06	<i>E.coli</i>	21.7 kDa	2 μ g	10 μ g	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-6	AF-200-06	<i>E.coli</i>	20.9 kDa	5 μ g	20 μ g	1mg
Murine IL-6	AF-216-16	<i>E.coli</i>	21.7 kDa	2 μ g	10 μ g	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

PeperoGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeperoGMP® Human IL-6	GMP200-06-10 μ g	<i>E.coli</i>	20.9 kDa	10 μ g
PeperoGMP® Human IL-6	GMP200-06-100 μ g	<i>E.coli</i>	20.9 kDa	100 μ g

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-6	500-P26	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-6	500-P26BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Human IL-6	500-P26G	<i>Goat</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-6	500-P26GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine IL-6	500-P56	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine IL-6	500-P56BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IL-6	500-P73	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IL-6	500-P73BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat IL-6	500-P73G	<i>Goat</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat IL-6	500-P73GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-6 continued on next page...

IL-6 *continued...*

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-6	500-M06	Mouse	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-6	ABTS CATALOG # 900-K16
Human IL-6	TMB CATALOG # 900-T16
Murine IL-6	ABTS CATALOG # 900-K50
Murine IL-6	TMB CATALOG # 900-T50
Rat IL-6	ABTS CATALOG # 900-K86

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-6	ABTS CATALOG # 900-M16
Human IL-6	TMB CATALOG # 900-TM16
Murine IL-6	ABTS CATALOG # 900-M50
Murine IL-6	TMB CATALOG # 900-TM50
Rat IL-6	ABTS CATALOG # 900-M86

sIL-6 Receptor α *soluble Interleukin-6 Receptor alpha*

Synonyms: soluble Interleukin-6R α , CD126

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sIL-6 Receptor α	200-06R	HEK293 cells	37.9 kDa	5 μ g	20 μ g	1mg
Human sIL-6 Receptor α	200-06RC	CHO cells	37.9 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

IL-7 *Interleukin-7*

Synonyms: Lymphopoietin 1 (LP-1), pre-B-cell factor

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-7	200-07	<i>E.coli</i>	17.4 kDa	2µg	10µg	1mg
Murine IL-7	217-17	<i>E.coli</i>	15.0 kDa	2µg	10µg	1mg
Rat IL-7	400-07	<i>E.coli</i>	15.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-7	AF-200-07	<i>E.coli</i>	17.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

IL-7 continued on next page...

IL-7 *continued...***Polyclonal Antibodies** - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-7	500-P27	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-7	500-P27BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Murine IL-7	500-P57	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine IL-7	500-P57BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Rat IL-7	500-P310	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Rat IL-7	500-P310BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-7	500-M07	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-7	ABTS CATALOG # 900-K17
------------	-------------------------------

IL-8 (CXCL8) *Interleukin-8***Synonyms:** Monocyte-Derived Neutrophil Chemotactic Factor (MDNCF), Neutrophil Activating Factor (NAF), NAP-1**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-8 (CXCL8) (72 a.a.)	200-08M	<i>E.coli</i>	8.4 kDa	5µg	25µg 1mg
Human IL-8 (CXCL8) (77 a.a.)	200-08	<i>E.coli</i>	8.9 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-8 (CXCL8) (72 a.a.)	AF-200-08M	<i>E.coli</i>	8.4 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-8 (CXCL8)	500-P28	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-8 (CXCL8)	500-P28BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-8 (CXCL8)	500-M08	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

IL-8 continued on next page...

IL-8 (CXCL8) *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-8 (CXCL8)	ABTS CATALOG # 900-K18
Human IL-8 (CXCL8)	TMB CATALOG # 900-T18

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-8 (CXCL8)	ABTS CATALOG # 900-M18
Human IL-8 (CXCL8)	TMB CATALOG # 900-TM18

IL-9 *Interleukin-9*

Synonyms: p40 cytokine, T-cell growth factor p40

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-9	200-09	<i>E.coli</i>	14.0 kDa	2µg	10µg	1mg
Murine IL-9	219-19	<i>E.coli</i>	14.3 kDa	2µg	10µg	1mg
Rat IL-9	400-18	<i>E.coli</i>	14.3 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-9	AF-200-09	<i>E.coli</i>	14.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-9	500-P29	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-9	500-P29BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine IL-9	500-P59	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-9	500-P59BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-9	ABTS CATALOG # 900-K20
------------	-------------------------------

IL-10 *Interleukin-10*

Synonyms: B-TCGF, CSIF, TGIF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-10	200-10	<i>E.coli</i>	18.6 kDa	2µg	10µg 1mg
Murine IL-10	210-10	<i>E.coli</i>	18.7 kDa	2µg	10µg 1mg
Rat IL-10	400-19	<i>E.coli</i>	18.7 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-10	AF-200-10	<i>E.coli</i>	18.6 kDa	2µg	10µg 1mg
Murine IL-10	AF-210-10	<i>E.coli</i>	18.7 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-10	500-P20	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-10	500-P20BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Murine IL-10	500-P60	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine IL-10	500-P60BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Rat IL-10	500-P139	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Rat IL-10	500-P139BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-10	500-M86	<i>Mouse</i>	E, WB	500µg
Anti-Murine IL-10	500-M128	<i>Rat</i>	E, WB	500µg
Anti-Rat IL-10	500-M130	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-10	ABTS CATALOG # 900-K21
Murine IL-10	ABTS CATALOG # 900-K53
Murine IL-10	TMB CATALOG # 900-T53

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-10	ABTS CATALOG # 900-M21
Murine IL-10	ABTS CATALOG # 900-M53
Murine IL-10	TMB CATALOG # 900-TM53

IL-11 *Interleukin-11*

Synonyms: Adipogenesis Inhibitory Factor (AGIF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-11	200-11	<i>E.coli</i>	19.3 kDa	2µg	10µg 1mg
Murine IL-11	220-11	<i>E.coli</i>	19.1 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-11	AF-200-11	<i>E.coli</i>	19.3 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-11	500-P01	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-11	500-P01BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-11	500-M11	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-11	ABTS CATALOG # 900-K22
-------------	-------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-11	ABTS CATALOG # 900-M22
-------------	-------------------------------

IL-12 *Interleukin-12*

Synonyms: NKSF, CTL Maturation Factor (TCMF), Cytotoxic Lymphocyte Maturation Factor (CLMF), TSF;

p35: Interleukin-12 subunit alpha, IL-12 subunit p35, IL-12A, Cytotoxic Lymphocyte Maturation Factor 35 kDa subunit (CLMF p35), NK cell stimulating Factor Chain 1; **p40:** Interleukin-12 subunit beta, IL-12 subunit p40, IL-12B, Cytotoxic Lymphocyte Maturation Factor 40 kDa subunit (CLMF p40), NK cell Stimulating Factor Chain 2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-12 p40	200-12P40	<i>CHO cells</i>	40.0 kDa	2µg	10µg 1mg
Murine IL-12 p40	210-12P40H	<i>HEK293 cells</i>	40.0 kDa	2µg	10µg 1mg
Human IL-12 p70	200-12	<i>CHO cells</i>	75.0 kDa	2µg	10µg 1mg
Human IL-12 p70	200-12H	<i>HEK293 cells</i>	75.0 kDa	2µg	10µg 1mg
Murine IL-12 p70	210-12	<i>CHO cells</i>	75.0 kDa	2µg	10µg 1mg
Human IL-12 p80	CARTAGENA 200-12P80H	<i>Insect cells</i>	80.0 kDa	2µg	10µg 1mg
Murine IL-12 p80	210-12P80H	<i>HEK293 cells</i>	80.0 kDa	2µg	10µg 1mg

Additional sizes available please inquire

IL-12 continued on next page...

IL-12 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-12	500-P154G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-12	500-P154GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Murine IL-12	500-P155G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-12	500-P155GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IL-12	500-M12	<i>Mouse</i>	E, WB	500µg
Anti-Murine IL-12	500-M59	<i>Rat</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-12	ABTS CATALOG # 900-K96
Human IL-12	TMB CATALOG # 900-T96
Murine IL-12	ABTS CATALOG # 900-K97
Murine IL-12	TMB CATALOG # 900-T97

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-12	ABTS CATALOG # 900-M96
Human IL-12	TMB CATALOG # 900-TM96
Murine IL-12	ABTS CATALOG # 900-M97
Murine IL-12	TMB CATALOG # 900-TM97

IL-13 *Interleukin-13*

Synonyms: NC30 (Human), P600 (Murine)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-13	200-13	<i>E.coli</i>	12.6 kDa	2µg	10µg	1mg
Human IL-13 Variant	200-13A	<i>E.coli</i>	12.6 kDa	2µg	10µg	1mg
Murine IL-13	210-13	<i>E.coli</i>	12.3 kDa	2µg	10µg	1mg
Rat IL-13 (109 a.a.)	400-16	<i>E.coli</i>	11.9 kDa	2µg	10µg	1mg
Rat IL-13 (113 a.a.)	400-16L	<i>E.coli</i>	12.3 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-13	AF-200-13	<i>E.coli</i>	12.6 kDa	2µg	10µg	1mg

Additional sizes available please inquire

IL-13 continued on next page...

IL-13 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-13	500-P13	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-13	500-P13BT	Rabbit	E, WB	25µg	50µg	1mg
Anti-Murine IL-13	500-P178	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-13	500-P178BT	Rabbit	E, WB	25µg	50µg	1mg
Anti-Rat IL-13	500-P224	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Rat IL-13	500-P224BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-13	ABTS CATALOG # 900-K23
Murine IL-13	ABTS CATALOG # 900-K207

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-13	ABTS CATALOG # 900-M23
Murine IL-13	ABTS CATALOG # 900-M207

IL-15 *Interleukin-15*

Synonyms: IL-T

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-15	200-15	<i>E.coli</i>	12.9 kDa	2µg	10µg	1mg
Murine IL-15	210-15	<i>E.coli</i>	13.3 kDa	2µg	10µg	1mg
Rat IL-15	400-24	<i>E.coli</i>	13.5 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-15	AF-200-15	<i>E.coli</i>	12.9 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-15	500-P15	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-15	500-P15BT	Rabbit	E, WB	25µg	50µg	1mg
Anti-Murine IL-15	500-P173	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-15	500-P173BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human IL-15	500-M15	Mouse	E, WB	500µg	

Key: E = ELISA, WB = Western blot

IL-15 continued on next page...

IL-15 *continued...***Standard ELISA Development Kits**

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Murine IL-15 **ABTS CATALOG # 900-K188**

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Murine IL-15 **ABTS CATALOG # 900-M188**

IL-16 *Interleukin-16*

Synonyms: LCF (Lymphocyte Chemoattractant Factor)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-16 (121 a.a.)	200-16A	<i>E.coli</i>	12.4 kDa	2µg	10µg	1mg
Human IL-16 (129 a.a.)	200-16	<i>E.coli</i>	13.3 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-16 (121 a.a.)	AF-200-16A	<i>E.coli</i>	12.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-16	500-P06	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-16	500-P06BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-17A *Interleukin-17*

Synonyms: IL-17, CTLA-8

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-17A	200-17	<i>E.coli</i>	31.3 kDa	5µg	25µg	1mg
Murine IL-17A	210-17	<i>E.coli</i>	30.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-17A	AF-200-17	<i>E.coli</i>	31.3 kDa	5µg	25µg	1mg

Additional sizes available please inquire

IL-17A continued on next page...

IL-17A *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-17A	500-P07	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-17A	500-P07BT	Rabbit	E, WB	25µg	50µg	1mg
Anti-Human IL-17A	500-P07G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-17A	500-P07GBT	Goat	E, WB	25µg	50µg	1mg
Anti-Murine IL-17A	500-P265	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-17A	500-P265BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-17A	ABTS CATALOG # 900-K84
Murine IL-17A	ABTS CATALOG # 900-K392

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-17A	ABTS CATALOG # 900-M84
Murine IL-17A	ABTS CATALOG # 900-M392

IL-17B *Interleukin-17B*

Synonyms: IL-20, NIRF, Cytokine ZCYTO7

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-17B	200-28	<i>E.coli</i>	36.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-17B	500-P248	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-17B	500-P248BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-17D *Interleukin-17D*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-17D	200-27	<i>E.coli</i>	40.5 kDa	5µg	25µg	1mg

Additional sizes available please inquire

IL-17D continued on next page...

IL-17D *continued...*

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-17D	AF-200-27	<i>E.coli</i>	40.5 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-17D	500-P88	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-17D	500-P88BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

IL-17E *Interleukin-17E*

Synonyms: IL-25

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-17E	200-24	<i>E.coli</i>	33.8 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-17E	AF-200-24	<i>E.coli</i>	33.8 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-17E	500-P89	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-17E	500-P89BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-17E	ABTS CATALOG # 900-K234
Human IL-17E	TMB CATALOG # 900-T234

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-17E	ABTS CATALOG # 900-M234
Human IL-17E	TMB CATALOG # 900-TM234

IL-17F *Interleukin-17F*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-17F	200-25	<i>E.coli</i>	30.1 kDa	5µg	25µg	1mg
Murine IL-17F	210-17F	<i>E.coli</i>	30.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-17F	AF-200-25	<i>E.coli</i>	30.1 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-17F	500-P90	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-17F	500-P90BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-17F	ABTS CATALOG # 900-K277
--------------	-------------------------

IL-18BP *Interleukin-18 Binding Protein*

Synonyms: None

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Murine IL-18BP	500-P153G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-18BP	500-P153GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-19 *Interleukin-19*

Synonyms: Melanoma differentiation-associated protein-like protein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-19	200-19	<i>E.coli</i>	35.8 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-19	500-P189	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-19	500-P189BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

IL-20 *Interleukin-20*

Synonyms: Cytokine ZCYTO10

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-20	200-20	<i>E.coli</i>	35.2 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-20	500-P190G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-20	500-P190GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-20	ABTS CATALOG # 900-K224
-------------	--------------------------------

IL-21 *Interleukin-21*

Synonyms: Za11

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-21	200-21	<i>E.coli</i>	15.4 kDa	2µg	10µg	1mg
Murine IL-21	210-21	<i>E.coli</i>	15.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-21	AF-200-21	<i>E.coli</i>	15.4 kDa	2µg	10µg	1mg
Murine IL-21	AF-210-21	<i>E.coli</i>	15.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-21	500-P191	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-21	500-P191BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine IL-21	500-P278	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-21	500-P278BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-21	ABTS CATALOG # 900-K226
Murine IL-21	ABTS CATALOG # 900-K368

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Murine IL-21	ABTS CATALOG # 900-M368
--------------	--------------------------------

IL-22 *Interleukin-22*

Synonyms: IL-T1F, Cytokine ZCYTO18

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-22	200-22	<i>E.coli</i>	33.6 kDa	2µg	10µg	1mg
Murine IL-22	210-22	<i>E.coli</i>	33.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-22	AF-200-22	<i>E.coli</i>	33.6 kDa	2µg	10µg	1mg
Murine IL-22	AF-210-22	<i>E.coli</i>	33.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-22	500-P211	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-22	500-P211BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine IL-22	500-P223	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IL-22	500-P223BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-22	ABTS CATALOG # 900-K246
Murine IL-22	ABTS CATALOG # 900-K257

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-22	ABTS CATALOG # 900-M246
Murine IL-22	ABTS CATALOG # 900-M257

IL-23 *Interleukin-23*

Synonyms: None

RUO Cytokines

PRODUCT		CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-23	CARTAGENA	200-23	<i>Insect cells</i>	53.5 kDa	2µg	10µg	1mg

Additional sizes available please inquire

IL-24 *Interleukin-24*

Synonyms: MDA-7 (Melanoma Differentiation-Associated gene 7 protein)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-24	200-35	<i>CHO cells</i>	18.9 kDa	5µg	20µg	1mg

Additional sizes available please inquire

IL-27 *Interleukin-27*

Synonyms: Interleukin-27 subunit alpha, IL-27-A, Interleukin-27 subunit beta, IL-27B, Epstein-Barr virus-induced gene 3 protein, EBV-induced gene 3 protein, EBI3, p28, Interleukin-30, IL-30

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-27	200-38	HEK293 cells	47.8 kDa	2µg	10µg 1mg

Additional sizes available please inquire

IL-31 *Interleukin-31*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-31	200-31	<i>E.coli</i>	15.8 kDa	2µg	10µg 1mg
Murine IL-31	210-31	<i>E.coli</i>	15.8 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human IL-31	500-P249	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human IL-31	500-P249BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated **Key:** E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-31	ABTS CATALOG # 900-K347
-------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-31	ABTS CATALOG # 900-M347
-------------	--------------------------------

IL-33 *Interleukin-33*

Synonyms: IL-1 F11, NF-HEV

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human IL-33	200-33	<i>E.coli</i>	17.9 kDa	2µg	10µg 1mg
Murine IL-33	210-33	<i>E.coli</i>	17.5 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size
Human IL-33	AF-200-33	<i>E.coli</i>	17.9 kDa	2µg	10µg 1mg

Additional sizes available please inquire

IL-33 continued on next page...

IL-33 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IL-33	500-P261	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IL-33	500-P261BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IL-33	ABTS CATALOG # 900-K398
-------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IL-33	ABTS CATALOG # 900-M398
-------------	--------------------------------

IL-34 *Interleukin-34*

Synonyms: C16orf77

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-34	200-34	<i>HEK293 cells</i>	52.5 kDa	2µg	10µg	1mg

Additional sizes available please inquire

IL-35 *Interleukin-35*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-35	200-37	<i>HEK293 cells</i>	45.8 kDa	2µg	10µg	1mg

IL-36 α (IL-1F6) *Interleukin-36 alpha*

Synonyms: IL36A, Interleukin-1 family member 6 (IL-1F6), FIL1 ϵ (FIL1E), Interleukin-1 ϵ (IL1E)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-36 α (IL-1F6)	200-36A	<i>E.coli</i>	17.3 kDa	2µg	10µg	1mg

Additional sizes available please inquire

IL-36 β (IL-1F8) *Interleukin-36 beta*

Synonyms: IL-1H2, IL-1 eta

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-36 β (IL-1F8)	200-36B	<i>E.coli</i>	17.3 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

IL-36 γ (IL-1F9) *Interleukin-36 gamma*

Synonyms: IL-1 ϵ (epsilon), IL-1H1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-36 γ (IL-1F9)	200-36G	<i>E.coli</i>	17.0 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-36 γ (IL-1F9)	AF-200-36G	<i>E.coli</i>	17.0 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size	
Anti-Human IL-36 γ (IL-1F9)	500-P216	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human IL-36 γ (IL-1F9)	500-P216BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

IL-36RA *Interleukin-36 Receptor Antagonist*

Synonyms: Interleukin-36RA, FIL1 delta, IL-1F5, IL-1HY1, IL-1L1, IL-1RP3, IL-1ra Homolog 1, IL-1 delta

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-36RA	200-36RA	<i>E.coli</i>	17.0 kDa	5 μ g	25 μ g	1mg
Murine IL-36RA	210-36RA	<i>E.coli</i>	16.3 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

IL-37 *Interleukin-37*

Synonyms: IL-1F7, IL-1 ζ (zeta), IL-1H4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-37 (IL-1F7)	200-39	<i>E.coli</i>	19.4 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IL-37 (IL-1F7)	AF-200-39	<i>E.coli</i>	19.4 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

INSL5/INSL7 Hybrid

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human INSL5/INSL7 Hybrid	130-05	<i>E.coli</i>	5.2 kDa	5µg	25µg	1mg

Additional sizes available please inquire

IP-10 (CXCL10) *Gamma-Interferon Inducible Protein 10*

Synonyms: Crg-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human IP-10 (CXCL10)	300-12	<i>E.coli</i>	8.6 kDa	5µg	25µg	1mg
Murine IP-10 (CXCL10)	250-16	<i>E.coli</i>	8.7 kDa	5µg	25µg	1mg
Rat IP-10 (CXCL10)	400-33	<i>E.coli</i>	8.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human IP-10 (CXCL10)	500-P93	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human IP-10 (CXCL10)	500-P93BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine IP-10 (CXCL10)	500-P129	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine IP-10 (CXCL10)	500-P129BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Rat IP-10 (CXCL10)	500-P290	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Rat IP-10 (CXCL10)	500-P290BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human IP-10 (CXCL10)	500-M60	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human IP-10 (CXCL10)	ABTS CATALOG # 900-K39
Human IP-10 (CXCL10)	TMB CATALOG # 900-T39
Murine IP-10 (CXCL10)	ABTS CATALOG # 900-K153
Rat IP-10 (CXCL10)	ABTS CATALOG # 900-K449

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human IP-10 (CXCL10)	ABTS CATALOG # 900-M39
Human IP-10 (CXCL10)	TMB CATALOG # 900-TM39
Murine IP-10 (CXCL10)	ABTS CATALOG # 900-M153
Rat IP-10 (CXCL10)	ABTS CATALOG # 900-M449

Irisin

Synonyms: Fibronectin type III domain-containing protein 5 (FNDC5), Fibronectin type III repeat-containing protein 2 (FRCP2)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human/Murine/Rat Irisin	100-65	<i>CHO cells</i>	25.2 kDa	2µg	10µg 1mg

Additional sizes available please inquire

I-TAC (CXCL11) *Interferon Inducible T-cell α Chemokine*

Synonyms: B-R1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human I-TAC (CXCL11)	300-46	<i>E.coli</i>	8.3 kDa	5µg	20µg 1mg
Murine I-TAC (CXCL11)	250-29	<i>E.coli</i>	9.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human I-TAC (CXCL11)	AF-300-46	<i>E.coli</i>	8.3 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human I-TAC (CXCL11)	500-P132	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human I-TAC (CXCL11)	500-P132BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human I-TAC (CXCL11)	ABTS CATALOG # 900-K151
----------------------	--------------------------------

Kex-2

Synonyms: Endoproteinase Lys/Arg-Arg

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Yeast Kex-2 CARTAGENA	450-45	<i>Insect cells</i>	60.4 kDa	50µg	250µg 1mg

Additional sizes available please inquire

I-K

KGF (FGF-7) *Keratinocyte Growth Factor*

Synonyms: Fibroblast Growth Factor-7 (FGF-7), HBGF-7

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human KGF (FGF-7)	100-19	<i>E.coli</i>	18.9 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human KGF (FGF-7)	AF-100-19	<i>E.coli</i>	18.9 kDa	2µg	10µg 1mg

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® KGF	GMP100-19-50µg	<i>E.coli</i>	18.9 kDa	50µg
PeproGMP® KGF	GMP100-19-100µg	<i>E.coli</i>	18.9 kDa	100µg

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human KGF (FGF-7)	500-P19	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human KGF (FGF-7)	500-P19BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

K

KLF4-TAT *Kruppel-Like Factor-4*

Synonyms: EZF, GKLF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human KLF4-TAT	110-08	<i>HEK293 cells</i>	51.7 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Klotho

Synonyms: αKlotho, KLA

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Klotho	100-53	<i>CHO cells</i>	58.6 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Klotho	500-P296	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Klotho	500-P296BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

LAG-1 (CCL4L1) *Lymphocyte Activation Gene-1*

Synonyms: ACT-2, T-cell Activation-2, HC21

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human LAG-1 (CCL4L1)	300-58	<i>E.coli</i>	7.7 kDa	5µg	20µg 1mg

Additional sizes available please inquire

LD78β (CCL3L1)

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human LD78β (CCL3L1)	300-56	<i>E.coli</i>	7.7 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human LD78β (CCL3L1)	500-P187G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human LD78β (CCL3L1)	500-P187GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

LEC (CCL16) *Liver-Expressed Chemokine*

Synonyms: NCC-4, HCC-4, LMC, LCC-1, MTN-1, IL-10-inducible chemokine

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human LEC (CCL16)	300-44	<i>E.coli</i>	11.2 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human LEC (CCL16)	500-P125G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human LEC (CCL16)	500-P125GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human LEC (CCL16)	500-M43	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Leptin

Synonyms: Obesity protein (OB)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Leptin	300-27	<i>E.coli</i>	16.0 kDa	200µg	1mg 5mg
Murine Leptin	450-31	<i>E.coli</i>	16.2 kDa	200µg	1mg 5mg
Rat Leptin	400-21	<i>E.coli</i>	16.2 kDa	200µg	1mg 5mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Leptin	AF-300-27	<i>E.coli</i>	16.0 kDa	200µg	1mg 5mg
Murine Leptin	AF-450-31	<i>E.coli</i>	16.2 kDa	200µg	1mg 5mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Leptin	500-P86	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Leptin	500-P86BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Murine Leptin	500-P68	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine Leptin	500-P68BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Rat Leptin	500-P185G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Rat Leptin	500-P185GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human Leptin	500-M27	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Leptin	ABTS CATALOG # 900-K90
Murine Leptin	ABTS CATALOG # 900-K76

Leptin Receptor

Synonyms: LEP-R, HuB219, Obesity protein (OB) Receptor, OB-R

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Leptin Receptor	300-27R	<i>CHO cells</i>	93.5 kDa	20µg	100µg 1mg

Additional sizes available please inquire

LIF *Leukemia Inhibitory Factor*

Synonyms: Differentiation-stimulating factor, D factor, Melanoma-derived LPL inhibitor (MLPLI), Interleukin 6 family cytokine

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human LIF	300-05	<i>E.coli</i>	19.6 kDa	5µg	25µg	1mg
Murine LIF	250-02	<i>E.coli</i>	19.9 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human LIF	AF-300-05	<i>E.coli</i>	19.6 kDa	5µg	25µg	1mg
Murine LIF	AF-250-02	<i>E.coli</i>	19.9 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human LIF	500-P39	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human LIF	500-P39BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

LIGHT

Synonyms: TNFSF14, HVEM-L, CD258

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human LIGHT CARTAGENA	310-09B	<i>Insect cells</i>	19.3 kDa	3µg	15µg	1mg
Murine LIGHT	315-12	<i>E.coli</i>	20.1 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine LIGHT	AF-315-12	<i>E.coli</i>	20.1 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human LIGHT	500-P179	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human LIGHT	500-P179BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine LIGHT	500-P308	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine LIGHT	500-P308BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Lin28-TAT

Synonyms: CSDD1, LIN28A, ZCCHC1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Lin28-TAT	110-06	<i>E.coli</i>	24.4 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Lungkine (CXCL15)

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Murine Lungkine (CXCL15)	250-37	<i>E.coli</i>	16.3 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Lymphotactin (XCL1)

Synonyms: SCM-1a, ATAC

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Lymphotactin (XCL1)	300-20	<i>E.coli</i>	10.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Lymphotactin	500-P40	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Lymphotactin	500-P40BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

MANF *Mesencephalic Astrocyte-derived Neurotrophic Factor*

Synonyms: ARMET, Arginine-Rich Protein (ARP)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human MANF	450-06	<i>E.coli</i>	18.1 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Maspin

Synonyms: Serpin B5, Protease inhibitor 5

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Maspin	130-12	<i>E.coli</i>	42.1 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Maspin	500-P270	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Maspin	500-P270BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

MCPs *Monocyte Chemotactic Proteins*

Synonyms: MCP-1: MCAF, JE (murine); MCP-2: HC14; MCP-3: MARC; MCP-4: NCC-1; MCP-5: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MCP-1 (CCL2)	300-04	<i>E.coli</i>	8.6 kDa	5µg	20µg	1mg
Murine JE/MCP-1 (CCL2)	250-10	<i>E.coli</i>	13.8 kDa	2µg	10µg	1mg
Rat MCP-1 (CCL2)	400-12	<i>E.coli</i>	14.0 kDa	2µg	10µg	1mg
Human MCP-2 (CCL8)	300-15	<i>E.coli</i>	8.9 kDa	2µg	10µg	1mg
Murine MCP-2 (CCL8)	250-14	<i>E.coli</i>	8.5 kDa	5µg	20µg	1mg
Human MCP-3 (CCL7)	300-17	<i>E.coli</i>	9.0 kDa	2µg	10µg	1mg
Murine MCP-3 (CCL7)	250-08	<i>E.coli</i>	8.5 kDa	2µg	10µg	1mg
Human MCP-4 (CCL13)	300-24	<i>E.coli</i>	8.6 kDa	5µg	20µg	1mg
Murine MCP-5 (CCL12)	250-04	<i>E.coli</i>	9.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MCP-1 (CCL2)	AF-300-04	<i>E.coli</i>	8.6 kDa	5µg	20µg	1mg
Murine MCP-2 (CCL8)	AF-300-15	<i>E.coli</i>	8.9 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MCP-1 (CCL2)	500-P34	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MCP-1 (CCL2)	500-P34BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine JE/MCP-1 (CCL2)	500-P113	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine JE/MCP-1 (CCL2)	500-P113BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Rat MCP-1 (CCL2)	500-P76	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Rat MCP-1 (CCL2)	500-P76BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human MCP-2 (CCL8)	500-P35	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MCP-2 (CCL8)	500-P35BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine MCP-2 (CCL8)	500-P127	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine MCP-2 (CCL8)	500-P127BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human MCP-3 (CCL7)	500-P37G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MCP-3 (CCL7)	500-P37GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Murine MCP-3 (CCL7)	500-P116G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine MCP-3 (CCL7)	500-P116GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Human MCP-4 (CCL13)	500-P04	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MCP-4 (CCL13)	500-P04BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human MCP-4 (CCL13)	500-P04G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MCP-4 (CCL13)	500-P04GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg
Anti-Murine MCP-5 (CCL12)	500-P61	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine MCP-5 (CCL12)	500-P61BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

MCPs continued on next page...

MCPs *continued...*

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human MCP-1 (CCL2)	500-M71	<i>Mouse</i>	E, WB	500µg
Anti-Human MCP-2 (CCL8)	500-M69	<i>Mouse</i>	E, WB	500µg
Anti-Human MCP-3 (CCL7)	500-M73	<i>Mouse</i>	E, WB	500µg
Anti-Human MCP-4 (CCL13)	500-M70	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human MCP-1 (CCL2)	ABTS CATALOG # 900-K31
Human MCP-1 (CCL2)	TMB CATALOG # 900-T31
Murine JE/MCP-1 (CCL2)	ABTS CATALOG # 900-K126
Rat MCP-1 (CCL2)	ABTS CATALOG # 900-K59
Human MCP-2 (CCL8)	ABTS CATALOG # 900-K41
Murine MCP-3 (CCL7)	ABTS CATALOG # 900-K123

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human MCP-1 (CCL2)	ABTS CATALOG # 900-M31
Human MCP-1 (CCL2)	TMB CATALOG # 900-TM31
Murine JE/MCP-1 (CCL2)	ABTS CATALOG # 900-M126
Rat MCP-1 (CCL2)	ABTS CATALOG # 900-M59
Human MCP-2 (CCL8)	ABTS CATALOG # 900-M41

M-CSF *Macrophage Colony Stimulating Factor*

Synonyms: CSF-1, MGI-IM

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human M-CSF	300-25	<i>E.coli</i>	36.8 kDa	2µg	10µg	1mg
Murine M-CSF	315-02	<i>E.coli</i>	36.4 kDa	2µg	10µg	1mg
Rat M-CSF	400-28	<i>E.coli</i>	36.2 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human M-CSF	AF-300-25	<i>E.coli</i>	36.8 kDa	2µg	10µg	1mg
Murine M-CSF	AF-315-02	<i>E.coli</i>	36.4 kDa	2µg	10µg	1mg
Rat M-CSF	AF-400-28	<i>E.coli</i>	36.2 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human M-CSF	500-P44	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human M-CSF	500-P44BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine M-CSF	500-P62G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine M-CSF	500-P62GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

M-CSF continued on next page...

M-CSF *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Murine M-CSF

ABTS CATALOG # 900-K245

MD-2/LY96 *Myeloid Differentiation Protein-2, Lymphocyte Antigen 96*

Synonyms: ESPO-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MD-2/LY96	160-07	HEK293 Cells	17.2 kDa	10µg	50µg	1mg

Additional sizes available please inquire

MDC (CCL22) *Macrophage-Derived Chemokine*

Synonyms: STCP-1, ABCD-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MDC (CCL22) (67 a.a.)	300-36	<i>E.coli</i>	8.0 kDa	5µg	20µg	1mg
Human MDC (CCL22) (69 a.a.)	300-36A	<i>E.coli</i>	8.1 kDa	5µg	20µg	1mg
Murine MDC (CCL22)	250-23	<i>E.coli</i>	7.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MDC (CCL22)	500-P107	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MDC (CCL22)	500-P107BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine MDC (CCL22)	500-P176	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine MDC (CCL22)	500-P176BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human MDC (CCL22)	500-M41	<i>Mouse</i>	E, WB	500µg	

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Murine MDC (CCL22)

ABTS CATALOG # 900-K197

MEC (CCL28) *Mucosae-associated Epithelial Chemokine*

Synonyms: CCK-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MEC (CCL28)	300-57	<i>E.coli</i>	12.3 kDa	5µg	20µg	1mg
Murine MEC (CCL28)	250-30	<i>E.coli</i>	12.6 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MEC (CCL28)	500-P297	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MEC (CCL28)	500-P297BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Mesothelin

Synonyms: MPF, MSLN, SMRP, CAK1 antigen, ERC, Pre-pro-megakaryocyte-potentiating factor

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Mesothelin	100-63	<i>CHO cells</i>	36.4 kDa	10µg	50µg	1mg

Additional sizes available please inquire

MIA *Melanoma Inhibitory Activity*

Synonyms: Cartilage-Derived Retinoic Acid-sensitive Protein (CD-RAP)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIA	130-01	<i>E.coli</i>	12.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIA	500-P243	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MIA	500-P243BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

MIA-2 *Melanoma Inhibitory Activity-2*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIA-2	130-02	<i>E.coli</i>	11.5 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIA-2	500-P255	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MIA-2	500-P255BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human MIA-2	ABTS CATALOG # 900-K357
-------------	--------------------------------

Midkine

Synonyms: MK, NRG-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Midkine	450-16	<i>E.coli</i>	13.4 kDa	5µg	20µg	1mg
Murine Midkine	315-25	<i>E.coli</i>	13.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Midkine	500-P171	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human Midkine	500-P171BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Midkine	ABTS CATALOG # 900-K190
---------------	--------------------------------

MIF *Macrophage Migration Inhibitory Factor*

Synonyms: GLIF, MMIF, GIF, Glycosylation-Inhibiting Factor

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIF	CARTAGENA 300-69	<i>Insect cells</i>	15.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

MIG (CXCL9) *Monokine Induced by Interferon- γ*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIG (CXCL9)	300-26	<i>E.coli</i>	11.7 kDa	5 μ g	20 μ g	1mg
Murine MIG (CXCL9)	250-18	<i>E.coli</i>	12.2 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIG (CXCL9)	500-P50	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIG (CXCL9)	500-P50BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human MIG (CXCL9)	500-M42	<i>Mouse</i>	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human MIG (CXCL9) **ABTS CATALOG # 900-K87**

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human MIG (CXCL9) **ABTS CATALOG # 900-M87**

MIP-1 α (CCL3), β (CCL4), γ (CCL9/10) *Macrophage Inflammatory Proteins-1 alpha, beta, gamma*

Synonyms: MIP-1 α : LD78 α ; MIP-1 β : ACT-2; MIP-1 γ : MRP2, CCF18

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-1 α (CCL3)	300-08	<i>E.coli</i>	7.8 kDa	5 μ g	20 μ g	1mg
Murine MIP-1 α (CCL3)	250-09	<i>E.coli</i>	7.8 kDa	2 μ g	10 μ g	1mg
Rat MIP-1 α (CCL3)	400-15	<i>E.coli</i>	7.8 kDa	5 μ g	20 μ g	1mg
Human MIP-1 β (CCL4)	300-09	<i>E.coli</i>	7.6 kDa	2 μ g	10 μ g	1mg
Murine MIP-1 β (CCL4)	250-32	<i>E.coli</i>	7.8 kDa	2 μ g	10 μ g	1mg
Rat MIP-1 β (CCL4)	400-09	<i>E.coli</i>	7.8 kDa	5 μ g	20 μ g	1mg
Murine MIP-1 γ (CCL9/10)	250-12	<i>E.coli</i>	11.6 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-1 α (CCL3)	AF-300-08	<i>E.coli</i>	7.8 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

MIP-1 α , β , γ continued on next page...

MIP-1 α (CCL3), β (CCL4), γ (CCL9/10) *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIP-1 α (CCL3)	500-P38	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIP-1 α (CCL3)	500-P38BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Human MIP-1 α (CCL3)	500-P38G	<i>Goat</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIP-1 α (CCL3)	500-P38GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine MIP-1 α (CCL3)	500-P121	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine MIP-1 α (CCL3)	500-P121BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Rat MIP-1 α (CCL3)	500-P77	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat MIP-1 α (CCL3)	500-P77BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Human MIP-1 β (CCL4)	500-P38B	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIP-1 β (CCL4)	500-P38BBT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine MIP-1 β (CCL4)	500-P213	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine MIP-1 β (CCL4)	500-P213BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine MIP-1 γ (CCL9/10)	500-P117	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine MIP-1 γ (CCL9/10)	500-P117BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human MIP-1 α (CCL3)	500-M74	<i>Mouse</i>	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human MIP-1 α (CCL3)	ABTS CATALOG # 900-K35
Murine MIP-1 α (CCL3)	ABTS CATALOG # 900-K125
Rat MIP-1 α (CCL3)	ABTS CATALOG # 900-K75
Human MIP-1 β (CCL4)	TMB CATALOG # 900-T36
Murine MIP-1 β (CCL4)	ABTS CATALOG # 900-K278

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human MIP-1 α (CCL3)	ABTS CATALOG # 900-M35
Murine MIP-1 α (CCL3)	ABTS CATALOG # 900-M125
Human MIP-1 β (CCL4)	TMB CATALOG # 900-TM36
Murine MIP-1 β (CCL4)	ABTS CATALOG # 900-M278

MIP-3 (CCL23) *Macrophage Inflammatory Protein-3*

Synonyms: MPIF-1, Ck- β 8

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-3 (CCL23)	300-29	<i>E.coli</i>	11.3 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIP-3 (CCL23)	500-P124	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIP-3 (CCL23)	500-P124BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

MIP-3 α (CCL20) *Macrophage Inflammatory Protein-3 alpha*

Synonyms: LARC, Exodus-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-3 α (CCL20)	300-29A	<i>E.coli</i>	8.0 kDa	5 μ g	20 μ g	1mg
Murine MIP-3 α (CCL20)	250-27	<i>E.coli</i>	7.9 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIP-3 α (CCL20)	500-P95A	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIP-3 α (CCL20)	500-P95ABT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human MIP-3 α (CCL20)	500-M28	<i>Mouse</i>	E, WB	500 μ g	

Key: E = ELISA, WB = Western blot

MIP-3 β (CCL19) *Macrophage Inflammatory Protein-3 beta*

Synonyms: ELC, Exodus-3, SCYA19

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-3 β (CCL19)	300-29B	<i>E.coli</i>	8.8 kDa	5 μ g	20 μ g	1mg
Murine MIP-3 β (CCL19)	250-27B	<i>E.coli</i>	9.2 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIP-3 β (CCL19)	500-P95B	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human MIP-3 β (CCL19)	500-P95BBT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human MIP-3 β (CCL19)	500-M29	<i>Mouse</i>	E, WB	500 μ g	

Key: E = ELISA, WB = Western blot

MIP-4 (CCL18) *Macrophage Inflammatory Protein-4*

Synonyms: PARC, DC-CK1, AMAC-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-4 (CCL18)	300-34	<i>E.coli</i>	7.8 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIP-4 (CCL18)	500-P108	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MIP-4 (CCL18)	500-P108BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

MIP-5 (CCL15) *Macrophage Inflammatory Protein-5*

Synonyms: HCC-2, Lkn-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MIP-5 (CCL15)	300-43	<i>E.coli</i>	10.1 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MIP-5 (CCL15)	500-P123G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MIP-5 (CCL15)	500-P123GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

MMP-1 *Matrix Metalloproteinase-1*

Synonyms: Fibroblast Collagenase, Interstitial Collagenase

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MMP-1	420-01	<i>E.coli</i>	42.7 kDa	2µg	10µg	1mg

Additional sizes available please inquire

MMP-2 *Matrix Metalloproteinase-2*

Synonyms: Gelatinase A, TBE-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MMP-2	420-02	<i>E.coli</i>	62.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

MMP-3 *Matrix Metalloproteinase-3*

Synonyms: Stromelysin-1, SL-1, Transin-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MMP-3	420-03	<i>E.coli</i>	42.8 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human MMP-3	500-P324	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human MMP-3	500-P324BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

MPF

Synonyms: Mesothelin, MSLN, SMRP, CAK1 antigen, Pre-pro-megakaryocyte-potentiating factor

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human MPF	100-62	<i>CHO cells</i>	26.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Myostatin

Synonyms: GDF-8

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat Myostatin	120-00	<i>E.coli</i>	25.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Myostatin-Propeptide

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Myostatin-Propeptide	120-12	<i>E.coli</i>	27.8 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Nanog

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Nanog	120-21	<i>E.coli</i>	34.7 kDa	5µg	20µg	1mg
Human Nanog-TAT	120-21B	<i>E.coli</i>	36.1 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Nanog continued on next page...

Nanog *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Nanog	500-P236	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human Nanog	500-P236BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot, N = Neutralization

NAP-2 (CXCL7) *Neutrophil Activating Protein-2*

Synonyms: PBP (parent molecule), CTAP-III (precursor)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human NAP-2 (CXCL7)	300-14	<i>E.coli</i>	7.6 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human NAP-2 (CXCL7)	500-P03	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human NAP-2 (CXCL7)	500-P03BT	Rabbit	E, WB	25µg	50µg	1mg
Anti-Human NAP-2 (CXCL7)	500-P03G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Human NAP-2 (CXCL7)	500-P03GBT	Goat	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human NAP-2 (CXCL7)	500-M33	Mouse	E, WB	500µg	

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human NAP-2 (CXCL7)	ABTS CATALOG # 900-K40
---------------------	-------------------------------

Nesfatin-1

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Nesfatin-1	300-67	<i>E.coli</i>	9.7 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Neuritin

Synonyms: CPG15, NRN1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Rat Neuritin	450-36D	<i>E.coli</i>	19.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Neuropoietin

Synonyms: NPO, NP

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Murine Neuropoietin	250-25B	<i>E.coli</i>	19.8 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Neuroserpin

Synonyms: Serpin I1, Protease inhibitor 12

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Neuroserpin	130-14	<i>E.coli</i>	44.8 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Neuroserpin	500-P271	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Neuroserpin	500-P271BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Neuroserpin	ABTS CATALOG # 900-K412
-------------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human Neuroserpin	ABTS CATALOG # 900-M412
-------------------	--------------------------------

Neurturin

Synonyms: NTN, NRTN

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Neurturin	450-11	<i>E.coli</i>	23.6 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Neurturin	500-P102	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Neurturin	500-P102BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

β -NGF *beta-Nerve Growth Factor***Synonyms:** NGF- β **RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human β -NGF	450-01	<i>E.coli</i>	27.0 kDa	20 μ g	100 μ g 1mg
Murine β -NGF	450-34	<i>E.coli</i>	26.8 kDa	5 μ g	20 μ g 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human β -NGF	AF-450-01	<i>E.coli</i>	27.0 kDa	20 μ g	100 μ g 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human β -NGF	500-P85	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human β -NGF	500-P85BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human β -NGF	500-M85	<i>Mouse</i>	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human β -NGF	ABTS CATALOG # 900-K60
--------------------	-------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human β -NGF	ABTS CATALOG # 900-M60
--------------------	-------------------------------

NNT-1/BCSF-3 *Novel Neurotrophin-1/B-Cell-Stimulating Factor-3***Synonyms:** Cardiotrophin-like cytokine, Cardiotrophin-like cytokine factor 1 (CLCF1)**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human NNT-1/BCSF-3	450-18	<i>E.coli</i>	22.4 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-human NNT-1/BCSF-3	500-P186	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-human NNT-1/BCSF-3	500-P186BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Noggin

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Noggin	120-10C	HEK293 cells	46.0 kDa	5µg	20µg	1mg
Murine Noggin	250-38	E.coli	46.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine Noggin	AF-250-38	E.coli	46.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

NOV *Nephroblastoma Overexpressed Gene*

Synonyms: CCN3, IGFBP9, NovH

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human NOV	120-26	E.coli	36.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human NOV	500-P257	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human NOV	500-P257BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human NOV	ABTS CATALOG #	900-K338
-----------	----------------	----------

NP-1 *Neutrophil Peptide-1*

Synonyms: Alpha Defensin-1, HNP-1, Cryptdin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human NP-1	300-42	E.coli	3.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human NP-1	500-P126G	Goat	E, WB	50µg	100µg	1mg
Biot. Anti-Human NP-1	500-P126GBT	Goat	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

NT-3 *Neurotrophin-3*

Synonyms: Neurotrophic Factor, Nerve Growth Factor-2 (NGF-2), HGNF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human NT-3	450-03	<i>E.coli</i>	27.2 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human NT-3	AF-450-03	<i>E.coli</i>	27.2 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human NT-3	500-P82	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human NT-3	500-P82BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Human NT-3	500-P82G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human NT-3	500-P82GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

NT-4 *Neurotrophin-4*

Synonyms: Neurotrophin 4/5 (NT-4/NT-5)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human NT-4	450-04	<i>E.coli</i>	28.1 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human NT-4	AF-450-04	<i>E.coli</i>	28.1 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human NT-4	500-P83G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human NT-4	500-P83GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human NT-4	500-M24	<i>Mouse</i>	E	500µg

Key: E = ELISA, WB = Western blot

Oncostatin M

Synonyms: OSM

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Oncostatin M (196 a.a.)	300-10H	HEK293 cells	22.2 kDa	2µg	10µg	1mg
Human Oncostatin M (227 a.a.)	300-10	E.coli	25.7 kDa	2µg	10µg	1mg
Human Oncostatin M (209 a.a.)	300-10T	E.coli	23.6 kDa	2µg	10µg	1mg
Rat Oncostatin M	400-36	E.coli	24.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Oncostatin M (209 a.a.)	AF-300-10T	E.coli	23.6 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Oncostatin M	500-P30	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human Oncostatin M	500-P30BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

OPG Osteoprotegerin

Synonyms: TNFRSF11B, OCIF (Osteoclastogenesis Inhibitory Factor), TR1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human OPG	450-14	E.coli	20.0 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies- Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human OPG	500-P149	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human OPG	500-P149BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Osteopontin

Synonyms: Bone sialoprotein 1, Secreted phosphoprotein 1, SPP-1, Nephropontin, Uropontin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Osteopontin	120-35	HEK293 cells	33.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Osteopontin	500-P314	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human Osteopontin	500-P314BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

OTOR

Synonyms: Otoraplin, MIAL (Melonoma Inhibitory Activity-like Protein)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human OTOR	130-03	<i>E.coli</i>	12.7 kDa	5µg	20µg	1mg

Additional sizes available please inquire

sOX40 Ligand

Synonyms: OX40L, Glycoprotein Gp34, CD252, TXGP1, TNFSF4

RUO Cytokines

PRODUCT		CATALOG #	SOURCE	MW	Size A	Size B	
Human sOX40 Ligand	CARTAGENA	310-28	<i>Insect cells</i>	15.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

p16-INK4a

Synonyms: Cyclin-Dependent Kinase Inhibitor 2A, Cyclin-Dependent Kinase 4 Inhibitor A, CDK4I, p16INK4A, Multiple Tumor Suppressor 1, MTS-1, p16-INK4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human p16-INK4a	110-02	<i>E.coli</i>	16.5 kDa	5µg	20µg	1mg
Human p16-INK4a-TAT	110-02T	<i>E.coli</i>	18.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human p16-INK4a-TAT	500-P284T	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human p16-INK4a-TAT	500-P284TBT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

PAF-AH

Synonyms: PAF acetylhydrolase, PAF 2-acylhydrolase, LDL-associated Phospholipase A2, LDL-PLA(2), 2-acetyl-1-alkylglycerophosphocholine esterase, 1-alkyl-2-acetyl-glycerophosphocholine esterase

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PAF-AH	140-10	<i>HEK293 cells</i>	47.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

O-P

PAI-1 *Plasminogen Activator Inhibitor-1*

Synonyms: Serpin E1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PAI-1	140-04	<i>E.coli</i>	42.7 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human PAI-1	500-P260	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human PAI-1	500-P260BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human PAI-1	ABTS CATALOG #	900-K383
-------------	-----------------------	----------

PAI-2 *Plasminogen Activator Inhibitor-2*

Synonyms: Serpin B2, Urokinase Inhibitor, Monocyte Arg-serpin

Recombinant Proteins

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PAI-2	140-06	<i>E.coli</i>	46.5 kDa	2µg	10µg	1mg

Additional sizes available please inquire

PD-1 *Plasminogen Activator Inhibitor-2*

Synonyms: Programmed cell death protein 1 (PDCD1), CD279, SLEB2, hSLE1

Recombinant Proteins

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PD-1 Fc	310-40	<i>CHO cells</i>	55.3 kDa	10µg	50µg	1mg

Additional sizes available please inquire

PDGF-AA, -AB, -BB, -CC *Platelet-Derived Growth Factor*

Synonyms: **PDGF-AA:** Platelet-Derived Growth Factor-AA, Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF); **PDGF-AB:** Platelet-Derived Growth Factor-AB, Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF), PCGF; **PDGF-BB:** Platelet-Derived Growth Factor-BB, Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF); **PDGF-CC:** Platelet-Derived Growth Factor-CC, Spinal Cord-Derived Growth Factor (SCDGF), Fallotein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PDGF-AA	100-13A	<i>E.coli</i>	28.5 kDa	2µg	10µg	1mg
Murine PDGF-AA	315-17	<i>E.coli</i>	28.7 kDa	2µg	10µg	1mg
Human PDGF-AB	100-00AB	<i>E.coli</i>	26.4 kDa	2µg	10µg	1mg
Human PDGF-BB	100-14B	<i>E.coli</i>	24.3 kDa	2µg	10µg	1mg
Murine PDGF-BB	315-18	<i>E.coli</i>	24.4 kDa	2µg	10µg	1mg
Human PDGF-CC	100-00CC	<i>E.coli</i>	25.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PDGF-AA	AF-100-13A	<i>E.coli</i>	28.5 kDa	2µg	10µg	1mg
Human PDGF-BB	AF-100-14B	<i>E.coli</i>	24.3 kDa	2µg	10µg	1mg

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size	
PeproGMP® PDGF-AA	GMP100-13A-50µg	<i>E.coli</i>	28.5 kDa	50µg	
PeproGMP® PDGF-AA	GMP100-13A-100µg	<i>E.coli</i>	28.5 kDa	100µg	

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human PDGF-AA	500-P46	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human PDGF-AA	500-P46BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human PDGF-BB	500-P47	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human PDGF-BB	500-P47BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human PDGF-BB	ABTS CATALOG # 900-K04
---------------	-------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human PDGF-BB	ABTS CATALOG # 900-M04
---------------	-------------------------------

PD-L1 Fc *Programmed Death Ligand 1*

Synonyms: Programmed cell death 1 Ligand 1 (PDCD1L1), PD-1, B7-H1 (B7 homolog 1), CD274, SLEB2, SLE1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PD-L1 Fc	310-35	<i>CHO cells</i>	51.3 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human PD-L1 Fc	500-P321	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human PD-L1 Fc	500-P321BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

PD-L2 Fc *Programmed Death Ligand 2*

Synonyms: Programmed cell death 1 ligand 2 (PDCD1 ligand 2), PD-1 ligand 2, Programmed death ligand 2, Butyrophilin B7-DC, CD273, PDCD1LG2, PDCD1L2, PDLB7DC

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PD-L2 Fc	310-38	<i>CHO cells</i>	48.6 kDa	20µg	100µg	1mg

Additional sizes available please inquire

PECAM-1 *Platelet Endothelial Cell Adhesion Molecule*

Synonyms: CD31 antigen, EndoCAM

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PECAM-1	150-06	<i>HEK293 cells</i>	64.3 kDa	10µg	50µg	1mg

Additional sizes available please inquire

PEDF *Pigment Epithelium-Derived Factor*

Synonyms: SerpinF1, EPC-1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PEDF	130-13	<i>E.coli</i>	44.5 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Persephin

Synonyms: PSP, PSPN

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Persephin	450-12	<i>E.coli</i>	20.8 kDa	5µg	20µg	1mg
Murine Persephin	450-35	<i>E.coli</i>	20.6 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Persephin continued on next page...

Persephin *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Persephin	500-P138	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human Persephin	500-P138BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

PF-4 (CXCL4) *Platelet Factor-4*

Synonyms: Oncostatin A, Ironplact

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PF-4 (CXCL4)	300-16	<i>E.coli</i>	7.8 kDa	5µg	20µg	1mg
Murine PF-4 (CXCL4)	250-39	<i>E.coli</i>	8.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human PF-4 (CXCL4)	500-P05	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human PF-4 (CXCL4)	500-P05BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Pleiotrophin

Synonyms: PTN, Heparin Affin Regulatory Protein (HARP), Heparin-Binding Growth Factor-8 (HBGF-8), Osteoblast-Specific Factor 1 (OSF-1)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Pleiotrophin	450-15	<i>E.coli</i>	15.4 kDa	5µg	20µg	1mg

Additional sizes available please inquire

PlGF-1 *Placenta Growth Factor-1*

Synonyms: PGF, PlGF, PGFL

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PlGF-1	100-06	<i>E.coli</i>	29.7 kDa	5µg	25µg	1mg
Rat PlGF-1	400-39	<i>E.coli</i>	30.3 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PlGF-1	AF-100-06	<i>E.coli</i>	29.7 kDa	5µg	25µg	1mg

Additional sizes available please inquire

PlGF-1 continued on next page...

PIGF-1 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human PlGF-1	500-P226	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human PlGF-1	500-P226BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human PlGF-1	ABTS CATALOG # 900-K307
--------------	-------------------------

PIGF-2 *Placenta Growth Factor-2*

Synonyms: PGFL

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PlGF-2	100-56	<i>E.coli</i>	34.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

PIGF-3 *Placenta Growth Factor-3*

Synonyms: PGFL

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human PlGF-3	100-57	<i>E.coli</i>	45.7 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Prokineticin-2

Synonyms: PROK2, PK2, Protein Bv8 homolog

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Prokineticin-2	100-46	<i>E.coli</i>	8.8 kDa	5µg	20µg	1mg
Murine Prokineticin-2	315-38	<i>E.coli</i>	11.6 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Prolactin

Synonyms: Mamotropin, Luterotropic hormone, Lutetropin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Prolactin	100-07	<i>E.coli</i>	23.0 kDa	10µg	50µg	1mg
Murine Prolactin	315-16	<i>E.coli</i>	22.5 kDa	10µg	50µg	1mg
Rat Prolactin	400-27	<i>E.coli</i>	22.6 kDa	10µg	50µg	1mg

Additional sizes available please inquire

PTHrP *Parathyroid Hormone-related Protein*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human PTHrP	100-09	<i>E.coli</i>	9.8 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human PTHrP	500-P276	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human PTHrP	500-P276BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

R-Spondin-1, -2, -3 *Roof plate-specific Spondin-1, -2, -3*

Synonyms: R-Spondin-1: RSPO1; R-Spondin-2: RSPO2; R-Spondin-3: RSPO3, PWTSR, THSD2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human R-Spondin-1	120-38	<i>CHO cells</i>	26.7 kDa	5µg	20µg 1mg
Murine R-Spondin-1	315-32	<i>CHO cells</i>	27.1 kDa	5µg	20µg 1mg
Human R-Spondin-2	120-43	<i>CHO cells</i>	24.4 kDa	5µg	20µg 1mg
Human R-Spondin-3	120-44	<i>CHO cells</i>	26.9 kDa	5µg	20µg 1mg

Additional sizes available please inquire

P-R

sRANK Ligand *soluble Receptor Activator of NF-κB Ligand*

Synonyms: TNFSF11, TRANCE (TNF-Related Activation-induced Cytokine), OPGL (Osteoprotegerin Ligand), ODF (Osteoclast Differentiation Factor), CD254

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sRANK Ligand	310-01	<i>E.coli</i>	20.0 kDa	2µg	10µg 1mg
Human sRANK Ligand	310-01C	<i>CHO cells</i>	22.1 kDa	2µg	10µg 1mg
Murine sRANK Ligand	315-11	<i>E.coli</i>	19.4 kDa	2µg	10µg 1mg
Murine sRANK Ligand	315-11C	<i>CHO cells</i>	19.8 kDa	2µg	10µg 1mg
Rat sRANK Ligand	400-30	<i>E.coli</i>	19.4 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sRANK Ligand	AF-310-01	<i>E.coli</i>	20.0 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human sRANK Ligand	500-P133	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human sRANK Ligand	500-P133BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Human sRANK Ligand	500-P133G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human sRANK Ligand	500-P133GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg
Anti-Murine sRANK Ligand	500-P63	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine sRANK Ligand	500-P63BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

sRANK Ligand continued on next page...

sRANK Ligand *continued...*

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human sRANK Ligand	500-M46	Mouse	E	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human sRANK Ligand	ABTS CATALOG # 900-K142
Murine sRANK Ligand	ABTS CATALOG # 900-K233

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human sRANK Ligand	ABTS CATALOG # 900-M142
Murine sRANK Ligand	ABTS CATALOG # 900-M233

sRANK Receptor *soluble RANK Receptor*

Synonyms: TNFRSF11A, TRANCE Receptor (TNF-Related Activation-induced Cytokine Receptor), ODAR (Osteoclast Differentiation and Activation Receptor), ODFR (Osteoclast Differentiation Factor Receptor), CD265

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human sRANK Receptor	310-08	<i>E.coli</i>	19.3 kDa	20µg	100µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human sRANK Receptor	500-P144	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human sRANK Receptor	500-P144BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

RANTES (CCL5) *Regulation upon Activation Normal T-cell Expressed Sequence*

Synonyms: SIS-delta

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human RANTES (CCL5)	300-06	<i>E.coli</i>	7.8 kDa	5µg	20µg 1mg
Murine RANTES (CCL5)	250-07	<i>E.coli</i>	7.8 kDa	5µg	20µg 1mg
Rat RANTES (CCL5)	400-13	<i>E.coli</i>	7.9 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human RANTES (CCL5)	AF-300-06	<i>E.coli</i>	7.8 kDa	5µg	20µg 1mg

Additional sizes available please inquire

RANTES continued on next page...

RANTES *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human RANTES (CCL5)	500-P36	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human RANTES (CCL5)	500-P36BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine RANTES (CCL5)	500-P118	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine RANTES (CCL5)	500-P118BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Rat RANTES (CCL5)	500-P78	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Rat RANTES (CCL5)	500-P78BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human RANTES (CCL5)	500-M75	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human RANTES (CCL5)	ABTS CATALOG # 900-K33
Murine RANTES (CCL5)	ABTS CATALOG # 900-K124
Rat RANTES (CCL5)	ABTS CATALOG # 900-K72

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human RANTES (CCL5)	ABTS CATALOG # 900-M33
Murine RANTES (CCL5)	ABTS CATALOG # 900-M124
Rat RANTES (CCL5)	ABTS CATALOG # 900-M72

Relaxin-2

Synonyms: H2 relaxin, RLN2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Relaxin-2	130-15	<i>E.coli</i>	6.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Relaxin-3

Synonyms: H3 relaxin, Insulin-like peptide-7, INSL7

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Relaxin-3	130-10	<i>E.coli</i>	5.5 kDa	5µg	25µg	1mg

Additional sizes available please inquire

RELM α *Resistin-like alpha*

Synonyms: Cysteine-rich secreted protein FIZZ1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine RELM α	450-26	<i>E.coli</i>	10.0 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Murine RELM α	500-P214	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine RELM α	500-P214BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot, N = Neutralization

RELM β *Resistin-like beta*

Synonyms: Cysteine-rich secreted protein FIZZ2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human RELM β	450-22	<i>E.coli</i>	19.0 kDa	5 μ g	25 μ g	1mg
Murine RELM β	450-26B	<i>E.coli</i>	18.0 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human RELM β	500-P217	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human RELM β	500-P217BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg
Anti-Murine RELM β	500-P215	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine RELM β	500-P215BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

RELM γ *Resistin-like gamma*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine RELM γ	450-26G	<i>E.coli</i>	9.2 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Resistin

Synonyms: FIZZ3, Adipose tissue-specific secretory factor, ADSF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Resistin	450-19	<i>E.coli</i>	19.5 kDa	5µg	25µg 1mg
Murine Resistin	450-28	<i>E.coli</i>	20.2 kDa	5µg	25µg 1mg
Rat Resistin	400-35	<i>E.coli</i>	20.0 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Resistin	500-P183	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Resistin	500-P183BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Human Resistin	500-P183G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Resistin	500-P183GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg
Anti-Murine Resistin	500-P182G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine Resistin	500-P182GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human Resistin	500-M91	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human Resistin	ABTS CATALOG # 900-K235
----------------	--------------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human Resistin	ABTS CATALOG # 900-M235
----------------	--------------------------------

ROR1

Synonyms: NTRKR1, Neurotrophic tyrosine kinase, receptor-related 1, Tyrosine-protein kinase transmembrane receptor ROR1, Receptor-tyrosine-kinase-like orphan receptor 1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human ROR1	160-04	<i>CHO cells</i>	42.4 kDa	20µg	100µg 1mg

Additional sizes available please inquire

SCF *Stem Cell Factor*

Synonyms: c-Kit Ligand, Mast Cell Growth Factor (MGF), Steel Factor (SF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human SCF	300-07	<i>E.coli</i>	18.4 kDa	2µg	10µg 1mg
Murine SCF	250-03	<i>E.coli</i>	18.3 kDa	2µg	10µg 1mg
Rat SCF	400-22	<i>E.coli</i>	18.4 kDa	2µg	10µg 1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® Human SCF	GMP300-07-50µg	<i>E.coli</i>	18.4 kDa	50µg
PeproGMP® Human SCF	GMP300-07-100µg	<i>E.coli</i>	18.4 kDa	100µg

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human SCF	AF-300-07	<i>E.coli</i>	18.4 kDa	2µg	10µg 1mg
Murine SCF	AF-250-03	<i>E.coli</i>	18.3 kDa	2µg	10µg 1mg
Rat SCF	AF-400-22	<i>E.coli</i>	18.4 kDa	2µg	10µg 1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human SCF	500-P48	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human SCF	500-P48BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Human SCF	500-P48G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human SCF	500-P48GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg
Anti-Murine SCF	500-P71	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Murine SCF	500-P71BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg
Anti-Rat SCF	500-P202	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Rat SCF	500-P202BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human SCF	500-M44	<i>Mouse</i>	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human SCF	ABTS CATALOG # 900-K34
Human SCF	TMB CATALOG # 900-T34
Murine SCF	ABTS CATALOG # 900-K78
Rat SCF	ABTS CATALOG # 900-K258

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human SCF	ABTS CATALOG # 900-M34
Human SCF	TMB CATALOG # 900-TM34
Rat SCF	ABTS CATALOG # 900-M258

SCGF- α , - β *Stem Cell Growth Factor -alpha, -beta*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human SCGF- α	100-22A	<i>E.coli</i>	33.9 kDa	2 μ g	10 μ g 1mg
Human SCGF- β	100-22B	<i>E.coli</i>	25.0 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human SCGF- β	500-P99G	<i>Goat</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human SCGF- β	500-P99GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Sclerostin

Synonyms: SOST, SOST1, CDD, VBCH, DAND6

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Sclerostin	100-49	<i>CHO cells</i>	18.4 kDa	5 μ g	20 μ g 1mg

SDF-1 α , β (CXCL12) *Stromal-Cell Derived Factor-1 alpha, beta*

Synonyms: PBSF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human SDF-1 α (CXCL12)	300-28A	<i>E.coli</i>	8.0 kDa	2 μ g	10 μ g 1mg
Murine SDF-1 α (CXCL12)	250-20A	<i>E.coli</i>	7.9 kDa	2 μ g	10 μ g 1mg
Rat SDF-1 α (CXCL12)	400-32A	<i>E.coli</i>	7.9 kDa	2 μ g	10 μ g 1mg
Human SDF-1 β (CXCL12)	300-28B	<i>E.coli</i>	8.5 kDa	2 μ g	10 μ g 1mg
Murine SDF-1 β (CXCL12)	250-20B	<i>E.coli</i>	8.5 kDa	2 μ g	10 μ g 1mg
Rat SDF-1 β (CXCL12)	400-32B	<i>E.coli</i>	8.4 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human SDF-1 α (CXCL12)	AF-300-28A	<i>E.coli</i>	8.0 kDa	2 μ g	10 μ g 1mg
Human SDF-1 β (CXCL12)	AF-300-28B	<i>E.coli</i>	8.5 kDa	2 μ g	10 μ g 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human SDF-1 α (CXCL12)	500-P87A	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human SDF-1 α (CXCL12)	500-P87ABT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg
Anti-Murine SDF-1 α (CXCL12)	500-P164G	<i>Goat</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Murine SDF-1 α (CXCL12)	500-P164GBT	<i>Goat</i>	E, WB	25 μ g	50 μ g 1mg
Anti-Rat SDF-1 α (CXCL12)	500-P315	<i>Rabbit</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Rat SDF-1 α (CXCL12)	500-P315BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g 1mg
Anti-Human SDF-1 β (CXCL12)	500-P87BG	<i>Goat</i>	E, WB	50 μ g	100 μ g 1mg
Biot. Anti-Human SDF-1 β (CXCL12)	500-P87BGBT	<i>Goat</i>	E, WB	25 μ g	50 μ g 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

SDF-1 α , β continued on next page...

SDF-1 α , β (CXCL12) *continued...*

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human SDF-1 α (CXCL12)

ABTS CATALOG # 900-K92

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human SDF-1 α (CXCL12)

ABTS CATALOG # 900-M92

Semaphorin 3A

Synonyms: SEMA3A, SEMAD

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Semaphorin 3A	150-17	<i>CHO cells</i>	226.2 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

SF-20

Synonyms: IL-25, Myeloid-derived growth factor (MYDGF)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine SF-20	210-25	<i>E.coli</i>	15.8 kDa	2 μ g	10 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Murine SF-20	500-P259	<i>Rabbit</i>	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine SF-20	500-P259BT	<i>Rabbit</i>	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Slit2-N

Synonyms: Slit homolog 2 protein, SLIL3

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Slit2-N	150-11	<i>HEK293 cells</i>	122.35 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Sonic Hedgehog (Shh)

Synonyms: Hh γ -1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Sonic Hedgehog (Shh)	100-45	<i>E.coli</i>	20.0 kDa	5 μ g	25 μ g	1mg
Murine Sonic Hedgehog (Shh)	315-22	<i>E.coli</i>	20.0 kDa	5 μ g	25 μ g	1mg

Additional sizes available please inquire

Sox2

Synonyms: Sex determining region Y (SRY)-box 2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Sox2	110-03	<i>E.coli</i>	34.3 kDa	5µg	25µg 1mg
Human Sox2-TAT	110-03T	<i>E.coli</i>	36.0 kDa	5µg	25µg 1mg

Additional sizes available please inquire

SPARC (Osteonectin) *Secreted Protein Acidic and Rich in Cysteine*

Synonyms: BM-40, ON

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human SPARC/Osteonectin	120-36	<i>CHO cells</i>	32.7 kDa	10µg	50µg 1mg

Additional sizes available please inquire

TACI *Transmembrane Activator and CAML Interactor*

Synonyms: TNFRSF13B, CD267

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human TACI	310-17	<i>E.coli</i>	17.8 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human TACI	500-P166G	<i>Goat</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human TACI	500-P166GBT	<i>Goat</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TACI	ABTS CATALOG # 900-K216
------------	--------------------------------

TAFA-2

Synonyms: Chemokine-like protein TAFA-2, FAM19A2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human TAFA-2	300-63	<i>E.coli</i>	11.2 kDa	5µg	20µg 1mg

Additional sizes available please inquire

S-T

TARC (CCL17) *Thymus and Activation-Regulated Chemokine*

Synonyms: ABCD-2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TARC (CCL17)	300-30	<i>E.coli</i>	8.0 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TARC (CCL17)	500-P97	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human TARC (CCL17)	500-P97BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

TECK (CCL25) *Thymus Expressed Chemokine*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TECK (CCL25)	300-45	<i>E.coli</i>	14.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TECK (CCL25)	AF-300-45	<i>E.coli</i>	14.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TECK (CCL25)	500-P134	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human TECK (CCL25)	500-P134BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human TECK (CCL25)	500-M48	<i>Mouse</i>	E, WB	500µg	

Key: E = ELISA, WB = Western blot

TFF-1, -2, -3 *Trefoil Factor-1, -2, -3*

Synonyms: **TFF-1:** pS2 protein, HP1.A, Breast Cancer Estrogen-Inducible protein (BCEI), PNR2; **TFF-2:** Spasmolytic Polypeptide (SP), Spasmolysin; **TFF-3:** Intestinal Trefoil Factor (ITF), TFI

Recombinant Proteins

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TFF-1	300-60	<i>E.coli</i>	6.7 kDa	5µg	20µg	1mg
Murine TFF-1	315-31	<i>E.coli</i>	7.4 kDa	5µg	20µg	1mg
Human TFF-2	300-59	<i>E.coli</i>	12.0 kDa	5µg	20µg	1mg
Murine TFF-2	315-30	<i>E.coli</i>	11.9 kDa	5µg	20µg	1mg
Human TFF-3	300-61	<i>E.coli</i>	13.2 kDa	5µg	20µg	1mg

Additional sizes available please inquire

TFF-1, -2, -3 continued on next page...

TFF-1, -2, -3 *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TFF-2	500-P312	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human TFF-2	500-P312BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot, N = Neutralization

TGF- α *Transforming Growth Factor alpha*

Synonyms: Sarcoma growth factor, TGF-type I, ETGF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TGF- α	100-16A	<i>E.coli</i>	5.5 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TGF- α	AF-100-16A	<i>E.coli</i>	5.5 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TGF- α	500-P16	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human TGF- α	500-P16BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot, N = Neutralization

TGF- β_1 , - β_2 , - β_3 *Transforming Growth Factor -beta 1, -beta 2, -beta 3*

Synonyms: TGF- β_1 : Differentiation inhibiting factor, Cartilage-inducing factor; TGF- β_2 : Glioblastoma-derived T-cell suppressor factor, BSC-1, Cetermin, Polyergin; TGF- β_3 : none

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TGF- β_1	100-21	HEK293 cells	25.0 kDa	2µg	10µg	1mg
Human TGF- β_1	100-21C	CHO cells	25.0 kDa	2µg	10µg	1mg
Human TGF- β_2	CARTAGENA 100-35	Insect cells	25.0 kDa	2µg	10µg	1mg
Human TGF- β_2	100-35B	HEK293 cells	25.0 kDa	2µg	10µg	1mg
Human TGF- β_3	100-36E	<i>E.coli</i>	25.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TGF- β_1	AF-100-21C	CHO cells	25.0 kDa	2µg	10µg	1mg
Human TGF- β_3	AF-100-36E	<i>E.coli</i>	25.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TGF- β_3	500-P280	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human TGF- β_3	500-P280BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

TGF- β_1 , - β_2 , - β_3 continued on next page...

TGF- β_1 , - β_2 , - β_3 *continued...*

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human TGF- β_1	500-M66	Mouse	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Thrombomodulin

Synonyms: CD141, BDCA-3, THBD, TM

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Thrombomodulin	100-58	HEK293 cells	51.4 kDa	2μg	10μg	1mg
Additional sizes available please inquire						

Additional sizes available please inquire

Thymosin- β_4

Synonyms: T β -4, Hematopoietic system regulatory peptide, Seraspenide, TMSB4X, TB4X, TMSB4

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human/Murine/Rat Thymosin-β4	140-14	E.coli	5.2 kDa	20μg	100μg	1mg
Additional sizes available please inquire						

Additional sizes available please inquire

TIGAR *TP53-Induced Glycolysis and Apoptosis Regulator*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TIGAR	150-14	<i>E.coli</i>	29.9 kDa	5μg	25μg	1mg
Human TIGAR-TAT	150-14T	<i>E.coli</i>	31.6 kDa	5μg	25μg	1mg

Additional sizes available please inquire

TIMP-1 *Tissue Inhibitor of Metalloproteinases 1*

Synonyms: Fibroblast collagenase inhibitor, Erythroid-potentiating activity

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TIMP-1	410-01	<i>E.coli</i>	20.6 kDa	2μg	10μg	1mg
Additional sizes available please inquire						

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TIMP-1	500-P280	<i>Rabbit</i>	E, WB	50μg	100μg	1mg
Biot. Anti-Human TIMP-1	500-P280BT	<i>Rabbit</i>	E, WB	25μg	50μg	1mg
Biot. = Biotinylated				Key: E = ELISA, WB = Western blot		

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

TIMP-1 continued on next page...

TIMP-1 *continued...***Standard ELISA Development Kits**

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TIMP-1 **ABTS CATALOG # 900-K438****Mini ELISA Development Kits**

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human TIMP-1 **ABTS CATALOG # 900-M438**TIMP-2 *Tissue Inhibitor of Metalloproteinases 2***Synonyms:** CSC-21K**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human TIMP-2	410-02	<i>E.coli</i>	21.8 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Tissue Factor

Synonyms: TF, TF1, Coagulation factor III, factor III, F3, Thromboplastin, CD142**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Tissue Factor	150-19	<i>CHO cells</i>	48.8 kDa	2µg	10µg 1mg

Additional sizes available please inquire

TL-1A

Synonyms: TNFSF15, VEGI**RUO Cytokines**

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human TL-1A	310-23	<i>E.coli</i>	22.0 kDa	5µg	20µg 1mg

*Additional sizes available please inquire***Polyclonal Antibodies** - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human TL-1A	500-P240	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human TL-1A	500-P240BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot**Standard ELISA Development Kits**

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TL-1A **ABTS CATALOG # 900-K290****Mini ELISA Development Kits**

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human TL-1A **ABTS CATALOG # 900-M290**

TLR-3 *Toll-Like Receptor 3*

Synonyms: CD283 antigen

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TLR-3	160-01	HEK293 cells	77.4 kDa	5µg	25µg	1mg

Additional sizes available please inquire

TLR-4 *Toll-Like Receptor 4*

Synonyms: TOLL, CD284, ARMD10

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TLR-4	160-06	HEK293 cells	69.3 kDa	10µg	50µg	1mg

Additional sizes available please inquire

TMIGD2/CD28H

Synonyms: Transmembrane and immunoglobulin domain-containing protein 2, CD28 homolog, Immunoglobulin and proline-rich receptor 1 (IGPR-1)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TMIGD2/CD28Hc Fc	310-42	CHO cells	40.1 kDa	10µg	50µg	1mg

Additional sizes available please inquire

TNF- α *Tumor Necrosis Factor-alpha*

Synonyms: TNFSF2, Cachectin, Differentiation-Inducing Factor (DIF), Necrosin, Cytotoxin, TNSF1A

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TNF- α	300-01A	<i>E.coli</i>	17.4 kDa	10µg	50µg	1mg
Murine TNF- α	315-01A	<i>E.coli</i>	17.3 kDa	5µg	20µg	1mg
Rat TNF- α	400-14	<i>E.coli</i>	17.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TNF- α	AF-300-01A	<i>E.coli</i>	17.4 kDa	10µg	50µg	1mg
Murine TNF- α	AF-315-01A	<i>E.coli</i>	17.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

TNF- α continued on next page...

TNF- α *continued...*

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TNF- α	500-P31A	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human TNF- α	500-P31ABT	Rabbit	E, WB	25 μ g	50 μ g	1mg
Anti-Human TNF- α	500-P31AG	Goat	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human TNF- α	500-P31AGBT	Goat	E, WB	25 μ g	50 μ g	1mg
Anti-Murine TNF- α	500-P64	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine TNF- α	500-P64BT	Rabbit	E, WB	25 μ g	50 μ g	1mg
Anti-Murine TNF- α	500-P64G	Goat	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Murine TNF- α	500-P64GBT	Goat	E, WB	25 μ g	50 μ g	1mg
Anti-Rat TNF- α	500-P72	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Rat TNF- α	500-P72BT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human TNF- α	500-M26	Mouse	E, WB	500 μ g

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TNF- α	ABTS CATALOG #	900-K25
Human TNF- α	TMB CATALOG #	900-T25
Murine TNF- α	ABTS CATALOG #	900-K54
Murine TNF- α	TMB CATALOG #	900-T54
Rat TNF- α	ABTS CATALOG #	900-K73
Rat TNF- α	TMB CATALOG #	900-T73

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human TNF- α	ABTS CATALOG #	900-M25
Human TNF- α	TMB CATALOG #	900-TM25
Murine TNF- α	ABTS CATALOG #	900-M54
Murine TNF- α	TMB CATALOG #	900-TM54
Rat TNF- α	ABTS CATALOG #	900-M73
Rat TNF- α	TMB CATALOG #	900-TM73

TNF- β *Tumor Necrosis Factor-beta*

Synonyms: TNFSF1B, Lymphotoxin-alpha (LT- α)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TNF- β	300-01B	<i>E.coli</i>	18.6 kDa	5 μ g	20 μ g	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TNF- β	500-P31B	Rabbit	E, WB	50 μ g	100 μ g	1mg
Biot. Anti-Human TNF- β	500-P31BBT	Rabbit	E, WB	25 μ g	50 μ g	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

sTNF Receptor Type I *soluble Tumor Necrosis Factor Receptor Type I*

Synonyms: TNFRSF1A, TNFAR, TNFR60, p60, p55, CD120a, TNFR1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sTNF Receptor Type I	310-07	<i>E.coli</i>	18.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sTNF Receptor Type I	AF-310-07	<i>E.coli</i>	18.3 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sTNF Receptor Type I	500-P143	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human sTNF Receptor Type I	500-P143BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

sTNF Receptor Type II *soluble Tumor Necrosis Factor Receptor Type II*

Synonyms: TNFRSF1B, p75, TNFR75, CD120b, TNFR80, p80, TNFR2

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sTNF Receptor Type II	310-12	<i>E.coli</i>	18.9 kDa	5µg	20µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sTNF Receptor Type II	500-P168	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human sTNF Receptor Type II	500-P168BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

TPO *Thrombopoietin*

Synonyms: Megakaryocyte colony-stimulating factor, c-MPL Ligand, MGDF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TPO	300-18	<i>E.coli</i>	18.6 kDa	2µg	10µg	1mg
Murine TPO	315-14	<i>E.coli</i>	18.7 kDa	2µg	10µg	1mg
Rat TPO	400-34	<i>E.coli</i>	18.7 kDa	2µg	10µg	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

PeperoGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeperoGMP® Human TPO	GMP300-18-50µg	<i>E.coli</i>	18.6 kDa	50µg
PeperoGMP® Human TPO	GMP300-18-100µg	<i>E.coli</i>	18.6 kDa	100µg

TPO continued on next page...

TPO *continued...*

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TPO	AF-300-18	<i>E.coli</i>	18.6 kDa	2µg	10µg	1mg
Murine TPO	AF-315-14	<i>E.coli</i>	18.7 kDa	2µg	10µg	1mg
Rat TPO	AF-400-34	<i>E.coli</i>	18.7 kDa	2µg	10µg	1mg

* See page 12 for available Cytokine Packages.

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TPO	500-P49	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human TPO	500-P49BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Human TPO	500-P49G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human TPO	500-P49GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TPO	ABTS CATALOG # 900-K44
-----------	------------------------

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human TPO	ABTS CATALOG # 900-M44
-----------	------------------------

sTRAIL/Apo2L *TNF-Related Apoptosis-Inducing Ligand*

Synonyms: TNFSF10, Apo2 ligand, TL2, CD253

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sTRAIL/Apo2L	310-04	<i>E.coli</i>	19.6 kDa	10µg	50µg	1mg
Murine TRAIL	315-19	<i>E.coli</i>	20.0 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sTRAIL/Apo2L	500-P135	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human sTRAIL/Apo2L	500-P135BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg
Anti-Murine TRAIL	500-P303	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Murine TRAIL	500-P303BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size	
Anti-Human sTRAIL/Apo2L	500-M49	<i>Mouse</i>	E, WB	500µg	

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human sTRAIL/Apo2L	ABTS CATALOG # 900-K141
--------------------	-------------------------

sTRAIL Receptor-1 *soluble TRAIL Receptor-1*

Synonyms: TNFRSF10A, DR4, Apo2, CD261

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sTRAIL Receptor-1	310-18	<i>E.coli</i>	22.7 kDa	10µg	50µg	1mg

Additional sizes available please inquire

sTRAIL Receptor-2 *soluble TRAIL Receptor-2*

Synonyms: TNFRSF10B, DR5, KILLER, TRICK2A, TRICKB, CD262

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human sTRAIL Receptor-2	310-19	<i>E.coli</i>	14.9 kDa	10µg	50µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human sTRAIL Receptor-2	500-P299	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human sTRAIL Receptor-2	500-P299BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

TREM-1 Fc *Triggering receptor expressed on monocytes 1*

Synonyms: CD354

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TREM-1 Fc	310-36	<i>CHO cells</i>	92.6 kDa	10µg	50µg	1mg

Additional sizes available please inquire

TSG *Twisted Gastrulation Protein*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TSG	120-09	<i>E.coli</i>	22.2 kDa	10µg	50µg	1mg

Additional sizes available please inquire

TSLP *Thymic Stromal Lymphopoietin*

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TSLP	300-62	<i>E.coli</i>	15.0 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TSLP	500-P258	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human TSLP	500-P258BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TSLP	ABTS CATALOG # 900-K334
------------	-------------------------

TWEAK *TNF-related Weak Inducer of Apoptosis*

Synonyms: TNFSF12, DR3LG, Apo3 Ligand

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TWEAK	310-06	<i>E.coli</i>	17.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TWEAK	AF-310-06	<i>E.coli</i>	17.0 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human TWEAK	500-P137G	<i>Goat</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human TWEAK	500-P137GBT	<i>Goat</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human TWEAK	ABTS CATALOG # 900-K149
-------------	-------------------------

TWEAK Receptor *TNF-related Weak Inducer of Apoptosis Receptor*

Synonyms: TNFRSF12A, FGF-inducible 14, FN14

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human TWEAK Receptor	310-21	<i>E.coli</i>	5.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Uteroglobulin

Synonyms: Clara Cell Phospholipid-Binding Protein, CCPBP, Clara Cells 10 kDa secretory protein, CC10, Secretoglobulin family 1A member 1, Urinary protein 1, UP-1, UP, Urine protein 1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Uteroglobulin	150-18	<i>E.coli</i>	16.1 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Uteroglobulin	500-P330	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Uteroglobulin	500-P330BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

VAP-1 Vascular Adhesion Protein-1

Synonyms: AOC3, SSAO, HPAO, Copper Amine Oxidase, Membrane Primary Amine Oxidase

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human VAP-1	150-16	<i>CHO cells</i>	81.8 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human VAP-1	500-P326	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human VAP-1	500-P326BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Vaspin

Synonyms: Visceral adipose tissue-derived serpin

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human Vaspin	130-11	<i>E.coli</i>	45.2 kDa	5µg	25µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human Vaspin	500-P256	<i>Rabbit</i>	E, WB	50µg	100µg 1mg
Biot. Anti-Human Vaspin	500-P256BT	<i>Rabbit</i>	E, WB	25µg	50µg 1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

VCAM-1 *Vascular Cell Adhesion Molecule 1*

Synonyms: CD106, INCAM-100, MGC108734, MGC99561, VCAM, VCAM1, VCAM1B, VECAM1

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human VCAM-1	150-04	HEK293 cells	74.1 kDa	10µg	50µg 1mg
Murine VCAM-1	315-37	CHO cells	74.4 kDa	10µg	50µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human VCAM-1	500-P300	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human VCAM-1	500-P300BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

VEGF *Vascular Endothelial Growth Factor*

Synonyms: VEGF₁₂₁: Vascular Endothelial Growth Factor 121, VPF, VEGF-A; VEGF₁₆₅: Vascular Endothelial Growth Factor 165, VPF, Folliculostellate cell-derived growth factor, Glioma-derived endothelial cell mitogen, VEGF-A

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human VEGF ₁₂₁	100-20A	<i>E.coli</i>	28.4 kDa	2µg	10µg 1mg
Human VEGF ₁₆₅	100-20	<i>E.coli</i>	38.2 kDa	2µg	10µg 1mg
Murine VEGF ₁₆₅	450-32	<i>E.coli</i>	39.0 kDa	2µg	10µg 1mg
Rat VEGF ₁₆₅	400-31	<i>E.coli</i>	38.5 kDa	2µg	10µg 1mg

Additional sizes available please inquire

PeproGMP® Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size
PeproGMP® Human VEGF ₁₆₅	GMP100-20-50µg	<i>E.coli</i>	38.2 kDa	50µg
PeproGMP® Human VEGF ₁₆₅	GMP100-20-100µg	<i>E.coli</i>	38.2 kDa	100µg

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human VEGF ₁₂₁	AF-100-20A	<i>E.coli</i>	28.4 kDa	2µg	10µg 1mg
Human VEGF ₁₆₅	AF-100-20	<i>E.coli</i>	38.2 kDa	2µg	10µg 1mg
Murine VEGF ₁₆₅	AF-450-32	<i>E.coli</i>	39.0 kDa	2µg	10µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human VEGF ₁₆₅	500-P10	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human VEGF ₁₆₅	500-P10BT	Rabbit	E, WB	25µg	50µg 1mg
Anti-Human VEGF ₁₆₅	500-P10G	Goat	E, WB	50µg	100µg 1mg
Biot. Anti-Human VEGF ₁₆₅	500-P10GBT	Goat	E, WB	25µg	50µg 1mg
Anti-Murine VEGF ₁₆₅	500-P131	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Murine VEGF ₁₆₅	500-P131BT	Rabbit	E, WB	25µg	50µg 1mg
Anti-Rat VEGF ₁₆₅	500-P275	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Rat VEGF ₁₆₅	500-P275BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

VEGF continued on next page...

VEGF *continued...*

Monoclonal Antibodies

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size
Anti-Human VEGF ₁₆₅	500-M88	Mouse	E, WB	500µg

Key: E = ELISA, WB = Western blot

Standard ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 1000 ELISA plate wells.

Human VEGF ₁₆₅	ABTS CATALOG # 900-K10
Human VEGF ₁₆₅	TMB CATALOG # 900-T10
Murine VEGF ₁₆₅	ABTS CATALOG # 900-K99
Rat VEGF ₁₆₅	ABTS CATALOG # 900-K436

Mini ELISA Development Kits

Each kit contains: capture antibody, detection antibody, calibrated standard, and HRP Conjugate, sufficient to assay the target cytokine in at least 200 ELISA plate wells.

Human VEGF ₁₆₅	ABTS CATALOG # 900-M10
Human VEGF ₁₆₅	TMB CATALOG # 900-TM10
Murine VEGF ₁₆₅	ABTS CATALOG # 900-M99
Rat VEGF ₁₆₅	ABTS CATALOG # 900-M436

V

VEGF-B *Vascular Endothelial Growth Factor-B*

Synonyms: VEGF-related factor, VRF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human VEGF-B	100-20B	<i>E.coli</i>	38.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B
Anti-Human VEGF-B	500-P267	Rabbit	E, WB	50µg	100µg 1mg
Biot. Anti-Human VEGF-B	500-P267BT	Rabbit	E, WB	25µg	50µg 1mg

Biot. = Biotinylated

Key: E = ELISA, WB = Western blot

VEGF-C *Vascular Endothelial Growth Factor-C*

Synonyms: VRP, Flt4-Ligand

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human VEGF-C	100-20CD	HEK293 cells	27.0 kDa	5µg	20µg 1mg

Additional sizes available please inquire

VEGF-D *Vascular Endothelial Growth Factor-D*

Synonyms: FIGF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human VEGF-D	100-20D	HEK293 cells	26.2 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Vimentin

Synonyms: Vim

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Vimentin	110-10	E.coli	54.3 kDa	20µg	100µg	1mg

Additional sizes available please inquire

Visfatin

Synonyms: PBEF (Pre-B-cell colony-enhancing factor), NAmPRTase (nicotinamide phosphoribosyltransferase), Nampt, VF

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Visfatin	130-09	E.coli	52.6 kDa	5µg	25µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human Visfatin	500-P222	Rabbit	E, WB	50µg	100µg	1mg
Biot. Anti-Human Visfatin	500-P222BT	Rabbit	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

Vitronectin

Synonyms: VTN, Serum-spreading factor, V75

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Vitronectin	140-09	HEK293 cells	52.2 kDa	100µg	500µg	1mg

Additional sizes available please inquire

Animal-Free Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human Vitronectin	AF-140-09	HEK293 cells	52.2 kDa	100µg	500µg	1mg

Additional sizes available please inquire

WISP-1 *WNT-1 Inducible Signaling Pathway Protein-1*

Synonyms: CCN4, Wnt-1-induced secreted protein

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human WISP-1	120-18	<i>E.coli</i>	38.1 kDa	5µg	20µg	1mg

Additional sizes available please inquire

WISP-3 *WNT-1 Inducible Signaling Pathway Protein-3*

Synonyms: CCN6

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human WISP-3	120-20	<i>E.coli</i>	36.8 kDa	5µg	20µg	1mg

Additional sizes available please inquire

WNT-1

Synonyms: INT-1, Wnt-1 proto-oncogene protein (precursor)

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Human WNT-1	120-17	<i>E.coli</i>	38.4 kDa	2µg	10µg	1mg

Additional sizes available please inquire

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human WNT-1	500-P250	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human WNT-1	500-P250BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

WNT-3a

Synonyms: Wingless-type MMTV (Mouse Mammary Tumor Virus) integration site family member 3a

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B	
Murine WNT-3a	315-20	<i>cell culture</i>	37.4 kDa	2µg	10µg	

Polyclonal Antibodies - Antigen Affinity Purified

PRODUCT	CATALOG #	SOURCE	APPLICATIONS	Size A	Size B	
Anti-Human WNT-3a	500-P251	<i>Rabbit</i>	E, WB	50µg	100µg	1mg
Biot. Anti-Human WNT-3a	500-P251BT	<i>Rabbit</i>	E, WB	25µg	50µg	1mg

Biot. = Biotinylated Key: E = ELISA, WB = Western blot

WNT-7a

Synonyms: None

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human WNT-7a	120-31	HEK293 cells	35.5 kDa	3µg	15µg 1mg

Additional sizes available please inquire

WNT-9b

Synonyms: WNT15, WNT14B, UNQ6973/PRO21956

RUO Cytokines

PRODUCT	CATALOG #	SOURCE	MW	Size A	Size B
Human WNT-9b	120-49	CHO cells	36.9 kDa	5µg	20µg 1mg

Additional sizes available please inquire

コントロール抗体

PRODUCT	CATALOG #	Size
Normal Goat IgG	500-G00	1mg
Normal Mouse IgG	500-M00	1mg
Normal Rabbit IgG	500-P00	500µg

W

ケモカイン命名法

Systematic Name CXC Chemokines	Functional Name(s) (mouse protein)	Responding Cell Type(s) (mouse protein)	Known Receptor(s)
CXC Chemokines			
CXCL1	GRO1, GRO- α , MGSA, NAP-3 (KC)	PMN	CXCR1, CXCR2
CXCL2	GRO2, GRO- β , MIP2- α (MIP-2)	PMN	CXCR1, CXCR2
CXCL3	GRO3, GRO- γ , MIP2- β (DCIP-1)	PMN	CXCR2
CXCL4	PF-4, Oncostatin-A	PMN, Mo	CXCR3B
CXCL5	ENA-78	PMN	CXCR2
CXCL6	GCP-2, CKA-3 (LIX)	PMN	CXCR1, CXCR2
CXCL7	NAP-2, PBP, LDGF, MDGF	PMN	CXCR1, CXCR2
CXCL8	IL-8, GCP-1, NAP-1	PMN, Bs	CXCR1, CXCR2
CXCL9	MIG	actT [Th1], NK	CXCR3
CXCL10	IP-10 (CRG-2)	Mo, actT [Th1], NK	CXCR3
CXCL11	I-TAC, IP-9	actT [Th1], NK	CXCR3, CXCR7
CXCL12	SDF-1, SDF-1 α/β , PBSF	All cell types	CXCR4, CXCR7
CXCL13	BCA-1, BLC	B, (Mo)	CXCR5
CXCL14	BRACK, MIP-2G	PMN, mDC (B, Mo)	unknown
CXCL15	(Lungkine)	(PMN)	unknown
CXCL16	SR-PSOX	actT	CXCR6
CXCL17	VEGF co-regulated chemokine 1, DMC	Mo, iDC	unknown
C Chemokines			
XCL1	Lymphotactin, ATAC, SCM-1	Tr	XCR1
XCL2	SCM-1 β	Tr	XCR1
CX3C Chemokines			
CX3CL1	Fractalkine, Neurotactin, CX3C	Mo, actT, NK	CX3CR1
CC Chemokines			
CCL1	I-309 (TCA-3)	iDC, actT [Th2], Mo (PMN)	CCR8
CCL2	MCP-1, MCAF, JE	Bs, Mo, actT, NK, iDC	CCR2, CCR4
CCL3	MIP-1 α , LD78 α	Eo, Mo, actT, NK, iDC (PMN)	CCR1, CCR4, CCR5
CCL3L1	LD78 β	Mo, actT, B	CCR1, CCR3, CCR5
CCL4	MIP-1 β , LAG-1	Mo, actT [Th1], NK, iDC	CCR5
CCL4L1	LAG-1 gene duplication	Mo	CCR1, CCR5
CCL5	RANTES	Eo, Bs, Mo, actT, NK, iDC, Tm	CCR1, CCR3, CCR4, CCR5
CCL6	(C-10)	(Mo)	CCR1
CCL7	MCP-3 (FIC)	Eo, Bs, Mo, actT, NK, iDC	CCR1, CCR2, CCR3
CCL8	MCP-2	Eo, Bs, Mo, actT, NK, iDC	CCR1, CCR2B, CCR3, CCR5
CCL9/10	(MIP-1 γ , MRP-2)	(PMN, actT)	CCR1
CCL11	Eotaxin	Eo, Bs, actT [Th2], iDC	CCR3
CCL12	(MCP-5)	(Eo, Bs, Mo, actT, NK, iDC)	CCR2
CCL13	MCP-4, CK β -10	Eo, Bs, Mo, actT, NK, iDC	CCR1, CCR2, CCR3
CCL14	HCC-1	Eo, Mo, T	CCR1, CCR3, CCR5
CCL15	MIP-5, MIP-18, HCC-2, LKN-1	Mo, T	CCR1, CCR3
CCL16	LEC, HCC-4	Mo, actT [Th1]	CCR1
CCL17	TARC (ABCD-2)	actT [Th2]	CCR4
CCL18	MIP-4, DC-CK1, PARC, AMAC-1	Tr, iDC	unknown
CCL19	MIP-3 β , ELC, Exodus-3, CK β -11	Tr, actT, mDC	CCR7
CCL20	MIP-3 α , LARC, Exodus-1	Tm, B, iDC, PMN	CCR6
CCL21	Exodus-2, 6Ckine, SLC	Tr, actT, mDC	CCR7
CCL22	MDC, STCP-1 (ABCD-1)	Mo, actT [Th2], NK, iDC	CCR4
CCL23	MIP-3, MPIF-1, CK β -8	PMN, Mo, Tr	CCR1
CCL24	Eotaxin-2, MPIF-2, CK β -6	Eo, Bs, actT [Th2], iDC, PMN, Tr	CCR3
CCL25	TECK	Thymocytes, Tr, iDC	CCR9
CCL26	MIP-4 α , Eotaxin-3	Eo, Bs, actT [Th2], iDC	CCR3
CCL27	CTACK, ILC, Eskine	actT	CCR10
CCL28	MEC	actT, Tr, Eo	CCR3, CCR10

KEY	
Tm	= memory T cells
B	= B-cells
actT	= activated T cell
Bs	= Basophil
Tr	= resting T cell
T	= T cells
Eo	= Eosinophil
NK	= Natural Killer cells
Mo	= monocyte
PMN	= neutrophils
mDC	= mature dendritic cells
iDC	= immature dendritic cells

FGF ファミリー

Fibroblast Growth Factors	Target Cells (Partial list)	Receptors	Function (Partial list)
FGF1 (Acidic FGF) Heparin-Binding Growth Factor-1 (HBGF-1) ECGF-beta (Endothelial Cell Growth Factor-beta)	mesenchymal, neuroectodermal endothelial cells	all FGF receptors	Angiogenic <i>in vivo</i> , mitogenic <i>in vitro</i> , wound healing
FGF2 (Basic FGF) Heparin-Binding Growth Factor-2 (HBGF-2) Prostatropin	mesenchymal, neuroectodermal endothelial cells	1b, 1c, 2c, 3c, 4	Vasculogenesis, wound healing, angiogenesis, hematopoiesis, neuron survival
FGF3 int-2	epithelial cells that express FGF receptor 2b	2b	Mesoderm induction, angiogenesis, inner ear development
FGF4 Heparin Secretory Transforming protein (HST-1) Transforming protein KS3 Heparin-Binding Growth Factor-4 (HBGF-4)	cells that express FGF receptors	1c, 2c, 3c, 4	Angiogenesis, vertebrate limb development and development of stomach cancer
FGF5 Heparin-Binding Growth Factor-5 (HBGF-5), Smag-82	cells that express FGF receptors	1c, 2c	Hair growth and development
FGF6 Heparin-Binding Growth Factor-6 (HBGF-6) HST-2	cells that express FGF receptors	1c, 2c, 4	Skeletal muscle development
FGF7/KGF (Keratinocyte Growth Factor) Heparin-Binding Growth Factor-7 (HBGF-7)	keratinocytes and epithelial cells that express FGF receptor 2b	2b	Keratinocyte growth factor, kidney and lung development, angiogenesis and wound healing
FGF8 Androgen-Induced Growth Factor (AIGF), Heparin-Binding Growth Factor-8 (HBGF-8)	mammary carcinoma cells and other cells that express FGF receptors	2c, 3c, 4 (possibly 1c)	Limb, central nervous system, cardiac outflow tract development
FGF9 Glia Activating Factor (GAF) Heparin-Binding Growth Factor-9 (HBGF-9)	glial cells, astrocyte cells and other cells that express FGF receptors	1c, 2c, 3b, 3c, 4	Glia-activating factor, motor neuron survival, lung and testes development
FGF10 FGFA Keratinocyte growth factor-2	epithelial cells that express FGF receptor 2b	2b	Wound healing, multi-organ including limb and lung development
FGF11 FGFB Fibroblast growth factor Homologous Factor-3 (FHF-3)	nuclear processes unrelated to the secreted FGFs	none	Appears to be involved in nervous system development and function
FGF12 FGFC Fibroblast growth factor Homologous Factor-1 (FHF-1)	nuclear processes unrelated to the secreted FGFs	none	Appears to be involved in nervous system development and function
FGF13 FGFD Fibroblast growth factor Homologous Factor-2 (FHF-2)	nuclear processes unrelated to the secreted FGFs	none	Appears to be involved in nervous system development and function
FGF14 FGFE Fibroblast growth factor Homologous Factor-4 (FHF-4)	nuclear processes unrelated to the secreted FGFs	none	Regulates central nervous system development and function
FGF15 FGFF, identified in mouse not human	cells that express FGF receptor 4	4	Regulator of cell division and patterning in specific regions of embryonic brain, spinal cord and sensory organs
FGF16 FGFG	cells that express FGF receptors	2c, 3c	Central nervous system development
FGF17 FGFH	cells that express FGF receptors	1c, 2c, 3c, 4	Signals induction and patterning of embryonic brain
FGF18 zFGF5 FGFI	cells that express FGF receptors	1c, 2c, 3c, 4	An essential regulator of long bone and calvarial development
FGF19 FGFJ, identified in human not mouse	cells that express FGF receptor 4	4	Expressed during brain development and during embryogenesis, regulates multiple metabolic processes in adulthood
FGF20 FGFK	epithelial and mesenchymal cells	1c, 2c, 3c	Expressed during limb and brain development
FGF21 FGFL	unknown at the time of printing	unknown at the time of printing	Expressed in liver and thymus, may play a role in Type 2 Diabetes
FGF22 FGFM	hair follicle keratinocytes	unknown at the time of printing	May be involved in cutaneous develop- ment and repair, and hair development
FGF23 FGFN	renal proxima epithelial cells	3c	Expressed in brain and thymus, regulates phosphate homeostasis, mutant in hypo- phosphatemic rickets, regulates multiple metabolic processes in adulthood

TGF- β スーパーファミリー

Name	Synonyms	Main Function	Natural Antagonists/ Binding Proteins
TGF- β_1	Differentiation inhibiting factor, cartilage-inducing factor	Regulates cell proliferation, growth, differentiation and motility. Involved in adipogenesis, chondrogenesis, embryogenesis, tissue remodeling, wound healing and tumor formation.	Follistatin, Follistatin-Like Related Gene (FLRG), Decorin, alpha-2 macroglobulin
TGF- β_2	Glioblastoma-derived T-cell suppressor factor, BSC-1, Cetermin, Polyergin	Regulates cell proliferation, growth, differentiation and motility. Involved in adipogenesis, chondrogenesis, embryogenesis, tissue remodeling, wound healing and tumor formation.	Decorin, alpha-2 macroglobulin
TGF- β_3	None	Regulates cell proliferation, growth, differentiation and motility. Involved in adipogenesis, chondrogenesis, embryogenesis, tissue remodeling, wound healing and tumor formation.	
TGF- β_4	Endometrial Bleeding Associated Factor beta-4, (EBAF) Lefty preproprotein, LEFTA	Essential for left-right (L-R) asymmetry determination of organ systems. Possible role in endometrial bleeding.	
Inhibin A	Inhibin alpha & beta A	Inhibits secretion of follitropin by the pituitary gland, regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	
Inhibin B	Inhibin alpha & beta B	Inhibits secretion of follitropin by the pituitary gland, regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	
Activin A	Activin beta-A, Inhibin beta-1, FRP (Follicle-stimulating hormone-Releasing Protein), FSH-releasing extra protein, FSH-releasing factor, EDF (Erythroid Differentiation Factor)	Regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	Follistatin, Follistatin-Like Related Gene (FLRG), GASP-1, Cerberus, alpha2 macroglobulin, DAN
Activin AB	Activin beta A & beta B	Regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	
Activin B	Activin beta-B, Inhibin beta-2	Regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	
Activin C	Activin beta-C, Inhibin beta-C, blastocyst B1	Regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	
Activin E	Activin beta-E, Inhibin beta-E	Regulates embryogenesis, osteogenesis, hematopoiesis, reproductive physiology and hormone secretion from the hypothalamic, pituitary and gonadal glands.	
BMP-2	BMP-2A	Induces cartilage and bone formation, plays a role in cardiac morphogenesis.	Noggin, Chordin, Follistatin, Follistatin-Like Related Gene (FLRG), GASP-1, DAN, Cerberus, Gremlin
BMP-3	Osteogenin, BMP-3A	Induces cartilage and bone formation.	
BMP-3B	GDF-10	Biological function unknown, but may play a role in differentiation of osteoblasts, augmenting BMP-2 activity.	
BMP-4	BMP2B (BMP2B1, BMP2B2, Bmp2-rs1), DVR4	Induces cartilage and bone formation, involved in mesoderm induction, tooth development, limb formation and fracture repair.	Noggin, Chordin, Chordin-like/Neuralin/Ventropin, Follistatin, DAN, Cerberus, Gremlin
BMP-5	None	Induces cartilage and bone formation.	Noggin, Chordin-like/Neuralin/Ventropin, Sclerostin/SOST
BMP-6	VGR, Vg-1-related protein	Induces cartilage and bone formation.	Noggin, Chordin-like/Neuralin/Ventropin, Follistatin, Follistatin-Like Related Gene (FLRG), Sclerostin/SOST
BMP-7	OP-1 (Osteogenic Protein-1)	Induces cartilage and bone formation, involved in calcium regulation and bone homeostasis. May act as an osteoinductive factor responsible for epithelial osteogenesis.	Noggin, Chordin, Follistatin-Like Related Gene (FLRG), DAN, Cerberus, Sclerostin/SOST
BMP-8	BMP-8a, OP-2 (Osteogenic Protein-2)	Induces cartilage and bone formation, involved in calcium regulation and bone homeostasis. May act as an osteoinductive factor responsible for epithelial osteogenesis.	
BMP-8b	OP-2 (Osteogenic Protein-2)	Stimulates cartilage and bone formation, implicated in calcium regulation and bone homeostasis.	
BMP-9	GDF-2	May be involved in bone formation, regulates blood glucose homeostasis, potential autocrine/paracrine mediator in the hepatic reticuloendothelial system, involved in chondrogenesis.	

Continued...

Name	Synonyms	Main Function	Natural Antagonists/ Binding Proteins
BMP-10	None	Plays a crucial role in trabeculation of the embryonic heart.	
BMP-11	GDF-11	Involved in the patterning of both mesodermal and neural tissues and in establishing the skeletal muscle. Acts globally to specific positional identity along the anterior/posterior axis.	Follistatin, Follistatin-like related gene (FLRG), GASP-1
BMP-12	GDF-7, CDMP-3	Induces the formation of tendon and ligament tissues.	
BMP-13	GDF-6, CDMP-2	Plays a role in cartilage homeostasis, involved in embryonic skeletal development, and formation of a tendon-like tissue.	Noggin
BMP-14	GDF-5, CDMP-1	Essential for limb cartilage and limb-joint formation in developing mice. Involved in embryonic skeletal development.	Noggin, DAN
BMP-15	GDF-9B	An oocyte-specific factor that regulates granulosa cell proliferation and differentiation, and is essential for normal follicular growth.	
GDF-1	Embryonic growth/ differentiation factor	May be involved in mediating cell differentiation events during embryonic development.	
GDF-2	BMP-9	Implicated in bone formation.	
GDF-3	Vgr-2, UNQ222/PRO248	Embryonal carcinoma stem cell-associated marker <i>in vitro</i> and <i>in vivo</i> .	
GDF-5	CDMP-1, BMP-14	Essential for limb cartilage and limb-joint formation in developing mice. Involved in embryonic skeletal development.	Noggin, DAN
GDF-6	BMP-13, CDMP-2	Plays a role in cartilage homeostasis involved in embryonic skeletal development and formation of a tendon-like tissue.	Noggin
GDF-7	BMP-12, CDMP-3	Induces the formation of tendon and ligament tissues.	
GDF-8	Myostatin	Regulates skeletal muscle mass.	Follistatin, Follistatin-Like Related Gene (FLRG), GASP-1
GDF-9	None	Essential for normal follicular growth.	
GDF-10	BMP-3B, BIP (Bone Inducing Protein)	Biological function unknown, but may play a role in differentiation of osteoblasts, augmenting BMP-2 activity.	
GDF-11	BMP-11	Involved in the patterning of both mesodermal and neural tissues and in establishing the skeletal muscle. Acts globally to specific positional identity along the anterior/posterior axis.	Follistatin, Follistatin-Like Related Gene (FLRG), GASP-1
GDF-15	PLAB, Placental TGF β , Prostate Differentiation Factor (PDF), NRG-1, MIC-1 (Macrophage Inhibiting Cytokine-1)	Possible mediator of placental control of embryonic development, may act as an autocrine regulatory molecule.	
GDNF	ATF (Astrocyte-derived Trophic Factor)	Promotes dopamine uptake and survival and morphological differentiation of midbrain neurons.	
Artemin	ART, ARTN, Enovin, Neublastin	Supports the survival of all peripheral ganglia such as sympathetic, neural crest and placodally-derived sensory neurons, and dopaminergic midbrain neurons.	
Neurturin	NTN, NRTN	Promotes the development and survival of sympathetic and sensory neurons.	
Persephin	PSP, PSPN	Promotes the survival of ventral midbrain dopaminergic neurons and motor neurons, and promotes ureteric bud branching.	
LEFTY-1	LEFTYB, Protein Lefty B	Essential for left-right (L-R) asymmetry of organ systems.	
LEFTY-2	LEFTYA, TGF- β 4, Protein Lefty A	Essential for left-right (L-R) asymmetry of organ systems.	
AMH (<i>anti-Muellerian Hormone</i>)	MIS, Muellerian inhibiting substance	Causes regression of the Muellerian duct, inhibits the growth of tumors derived from tissues of Muellerian duct origin.	
Dorsalin (<i>chick</i>)	Dorsalin-1, DSL-1	Regulates cell differentiation within neural tube.	
NODAL	None	Essential for mesoderm formation and subsequent organization of axial structures.	Cerberus

ニューロトロフィン/神経新生サイトカイン

Functional Name	Synonyms	Main Neurotrophic Functions (Partial List)	Disease/Disorder Relation (Partial List)	Receptors
β-NGF (beta-Nerve Growth Factor)	NGF-β	Supports survival and maintenance of neurons in the sensory and sympathetic nervous systems	Alzheimer's, Parkinson's, diabetic peripheral neuropathy, cardiovascular diseases	LNGFR, gp140/trk, p75NTR
BDNF (Brain Derived Neurotrophic Factor)	Abrineurin	Supports survival and maintenance of neurons in the central nervous system and peripheral nervous systems	Parkinson's, diabetic peripheral neuropathy, ALS, Huntington's	LNGFR, gp145/trkB, p75NTR
NNT-1/BCSF-3 (Novel Neurotrophin-1/ B-Cell Stimulating Factor-3)	Cardiotrophin-like cytokine (CLCF1)	Supports survival of motor and sympathetic neurons in chick embryos	Multifocal neuronal hypoplasia, neurodegenerative eye diseases (glaucoma), CISS (cold-induced sweating syndrome)	LIFR-β, gp130
NT-3 (Neurotrophin-3)	NGF-2, HGNF	Promotes growth and survival of new and existing neurons	Diabetic peripheral neuropathy, periodontal diseases	Trk, TrkB, TrkC, p75NTR
NT-4 (Neurotrophin-4)	NT-4/NT-5	Promotes survival of peripheral sensory sympathetic neurons	Huntington's, glaucoma	TrkB, p75NTR
GDNF (Glial-Derived Neurotrophic Factor)	ATF-1	Promotes dopamine uptake, survival and morphological differentiation of midbrain neurons	Parkinson's, ALS, Huntington's	RET/GFR1α-4α
MANF (Mesencephalic Astrocyte-Derived Neurotrophic Factor)	ARMET, Arginine-Rich Protein (ARP)	Promotes survival, growth and function of dopamine-specific neurons	Parkinson's, cancer	Unknown at time of printing
CDNF (Cerebral Dopamine Neurotrophic Factor)	ARMETL1	Promotes survival, growth and function of dopamine-specific neurons	Parkinson's	Unknown at time of printing
CNTF (Ciliary Neurotrophic Factor)	None	Promotes survival of ciliary neurons, primary sensory neurons, motor neurons, basal forebrain neurons, and type 2 astrocytes	ALS, Huntington's	CNTFR-α
IL-6 (Interleukin-6)	26 kDa protein, IFN-β2, B-cell Differentiation Factor (BCDF), BSF-2, HPGF, HSF, MGI-2	Involved in inflammation associated with Alzheimer's disease	Diabetes, atherosclerosis, Alzheimer's, depression, rheumatoid arthritis, systematic lupus, cancer, MS	IL-6Ra, gp130
Oncostatin M	OSM	Involved in the regulation of neurogenesis	Rheumatoid arthritis, atherosclerosis, cancer, TEL/JAK2 disease	LIFR-high affinity, gp130-low affinity
Cardiotrophin-1	CT-1	Enhances survival of different neuronal populations	Motor Neuron Diseases (MND), cardiovascular diseases	gp130, LIFR
IL-11 (Interleukin-11)	AGIF (Adipogenesis Inhibitory Factor)	Survival of oligodendrocytes, involved in inflammation associated with MS	Atherosclerosis, MS	IL-11Rα, gp130
LIF (Leukemia Inhibitory Factor)	Differentiation-stimulating factor, D-factor, Melanoma-Derived LPL inhibitor (MLPLI)	Promotes stimulation of differentiation of cholinergic nerves	Systemic lupus, cancer, epidermal hyperplasia in ALS	LIFR
Pleiotrophin	PTN, Heparin Affin Regulatory Protein (HARP), Heparin-Binding Growth Factor-8 (HBGF-8), Osteoblast-Specific Factor-1 (OSF-1)	Promotes neurite outgrowth	Angiogenesis, Parkinson's, cancer	ALK
Midkine	MK, NEGF-2	Promotes neurite outgrowth	Alzheimer's, cancer	ALK
Neurturin	NTN, NRTN	Promotes survival of sympathetic and sensory neurons	Parkinson's	Prefers RET/GFR2α
Artemin	ART, ARTN, Enovin, Neublastin	Promotes the survival of sympathetic, neural crest, placodally-derived sensory neurons, and dopaminergic midbrain neurons	Chronic Pain	Prefers RET/GFR3α
Persephin	PSP, PSPN	Promotes the survival of ventral midbrain dopaminergic neurons and motor neurons after sciatic nerve oxotomy	Alzheimer's	Prefers RET/GFR4α

TNF 命名法

TNF スーパーファミリー - リガンド

Nomenclature Name	Functional Names
TNFSF1	TNF- β , Lymphotoxin- α (LT- α), TNFSF1B
TNFSF2	TNF- α , Cachectin, DIF, Necrosin, Cytotoxin, TNFSF1A
TNFSF3	Lymphotoxin- β (LT- β), TNF-C
TNFSF4	OX40 Ligand (OX40L), Gp34, TXGP1, CD252
TNFSF5	CD40 Ligand (CD40L), TRAP, Gp39, CD154, T-BAM
TNFSF6	Fas Ligand (FasL), APTL, APT1LG1, CD95L, CD178
TNFSF7	CD70, CD27 Ligand (CD27L, CD27LG)
TNFSF8	CD30 Ligand (CD30L, CD30LG), CD153
TNFSF9	4-1BB Ligand (4-1BBL), CD137L
TNFSF10	TRAIL, Apo2 Ligand (Apo2L), CD253
TNFSF11	RANK Ligand (RANKL), TRANCE, OPGL, ODF, CD254
TNFSF12	TWEAK, Apo3 Ligand (Apo3L), DR3LG
TNFSF13	APRIL, TALL-2, TRDL-1, CD256
TNFSF13B	BAFF, BLyS, TALL-1, CD257, TNFSF20, THANK, ZTNF4
TNFSF14	LIGHT, HVEM-Ligand (HVEM-L), CD258
TNFSF15	TL1A, TL1, VEGI
TNFSF18	AITR Ligand (AITRL), TL-6, GITR Ligand (GITRL)

TNF スーパーファミリー - 受容体

Nomenclature Name	Functional Names
TNFRSF1A	TNF Receptor Type I (TNFR1), CD120a, p55, p60, TNFAR
TNFRSF1B	TNF Receptor Type II (TNFR2), CD120b, p75, p80
TNFRSF3	TNF Receptor Type III (TNFR3), Lymphotoxin- β Receptor, TNFR2-RP, TNFCR
TNFRSF4	OX40L Receptor, ACT35, TXGP1R, CD134
TNFRSF5	Bp50, CD40L Receptor, CDw40, CD40
TNFRSF6	FASLG Receptor, CD95, Apo-1
TNFRSF6B	DcR3, M68
TNFRSF7	CD27, CD27L Receptor, T14
TNFRSF8	CD30, CD30L Receptor, Ki-1
TNFRSF9	4-1BBL Receptor, CDw137, CD137, T-cell antigen ILA
TNFRSF10A	DR4, Apo2, TRAIL Receptor 1 (TRAILR1), CD261
TNFRSF10B	DR5, TRAIL Receptor 2 (TRAILR2), CD262, KILLER, TRICK2A, TRICKB
TNFRSF10C	DcR1, TRAIL Receptor 3 (TRAILR3), CD263
TNFRSF10D	DcR2, TRAIL Receptor 4 (TRAILR4), CD264
TNFRSF11A	RANK Receptor (RANKR), ODFR, CD265, ODAR, TRANCE Receptor
TNFRSF11B	Osteoprotegerin (OPG), OCIF, TR1
TNFRSF12	DR3, TNFRSF25, Apo3, AIR, TRAMP, LARD, WSL, WSL-1
TNFRSF13B	TACI, CD267
TNFRSF13C	BAFF Receptor (BAFFR), CD268, BLyS Receptor 3
TNFRSF14	HVEM, TR2, HveA, CD270, ATAR
TNFRSF16	NGF Receptor (NGFR), Gp80-LNGFR, p75NTR, p75 ICD, CD271
TNFRSF17	BCMA, CD269
TNFRSF18	AITR, GITR, CD357
TNFRSF19	TRADE
TNFRSF19L	RELT
TNFRSF21	DR6, CD358
TNFRSF22	SOBa, TNFRH2
TNFRSF23	SO, TNFRH1

VEGF/PDGF ファミリー

Functional Name	Synonyms	Expression (Partial List)	Function	Receptors (Selected List)
VEGF-A₁₂₁	Vascular Permeability Factor (VPF)	All vascularized tissues	Angiogenesis, induces endothelial cell proliferation, and cell migration, osteoclastogenesis	VEGFR-1,-2
VEGF-A₁₄₅	Vascular Permeability Factor (VPF)	All vascularized tissues	Angiogenesis, induces endothelial cell proliferation, vasculogenesis, permeabilization of blood vessels, osteoclastogenesis	VEGFR-1,-2, HSPG, Neuropilin-1
VEGF-A₁₆₅	Vascular Permeability Factor (VPF)	All vascularized tissues	Angiogenesis, induces endothelial cell proliferation, vasculogenesis, permeabilization of blood vessels, osteoclastogenesis	VEGFR-1,-2, HSPG, Neuropilin-1,-2
VEGF-A₁₈₉	Vascular Permeability Factor (VPF)	All vascularized tissues	Angiogenesis, induces endothelial cell proliferation, migration	HSPG, Neuropilin-1,-2
VEGF-A₂₀₆	Vascular Permeability Factor (VPF)	All vascularized tissues	Not determined at time of printing	HSPG, Neuropilin-1,-2
VEGF-B₁₆₇	VEGF-Related Factor (VRF)	Heart, skeletal muscle, vascular smooth muscle cells	Embryonic angiogenesis	VEGFR-1, Neuropilin-1
VEGF-B₁₈₆	VEGF-Related Factor (VRF)	Heart, skeletal muscle, vascular smooth muscle cells	Embryonic angiogenesis	VEGFR-1, Neuropilin-2
VEGF-C	VEGF-2, Vascular Endothelial Growth Factor Related protein (VRP), Flt4-Ligand	Neuroendocrine organs, lung, heart, kidney, vascular smooth muscle cells	Lymphangiogenesis and tumor angiogenesis	VEGFR-2,-3, Neuropilin-2
VEGF-D	c-Fos Induced Growth Factor (FIGF)	Neuroendocrine organs, lung, heart, skeletal muscle, small intestine, vascular smooth muscle cells	Lymphangiogenesis and tumor angiogenesis	VEGFR-2,-3
VEGF-E (Orf Virus)	None	Virus-derived	Induces endothelial proliferation, vascular permeability, angiogenesis	VEGFR-2, Neuropilin-1 (binds NZ2-VEGF-E variant)
VEGF-F (Snake venom)	None	Snake venom	Induces endothelial proliferation, vascular permeability, angiogenesis	VEGFR-2
PIGF-1	Placenta Growth Factor-1, PGFL, PGF, PIGF	Placenta, thyroid, lung, goiter	Angiogenesis, chemotactic towards monocytes, wound healing and tumor formation	VEGFR-1
PIGF-2	Placenta Growth Factor-2, PGFL	Placenta, thyroid, lung, goiter	Angiogenesis, chemotactic towards monocytes, wound healing and tumor formation	VEGFR-1, Neuropilin-1, Neuropilin-2
PIGF-3	Placenta Growth Factor-3, PGFL	Placenta	Angiogenesis, chemotactic towards monocytes, wound healing and tumor formation	VEGFR-1
PIGF-4	Placenta Growth Factor-4, PGFL	Placenta, thyroid, lung, goiter	Angiogenesis, chemotactic towards monocytes, wound healing and tumor formation	VEGFR-1
PDGF-AA	Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF)	α -granules, released upon platelet activation	Mitogenic factor, hyperplasia, cell migration, embryonic neuron development, angiogenesis	PDGFR- α
PDGF-BB	Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF)	Heart, brain (substantia nigra), placenta, fetal kidney	Mitogenic factor, hyperplasia, cell migration, embryonic neuron development, angiogenesis	PDGFR- α , PDGFR- β
PDGF-AB	Glioma-Derived Growth Factor (GDGF), Osteosarcoma-Derived Growth Factor (ODGF)	α -granules, released upon platelet activation	Mitogenic factor, hyperplasia, cell migration, embryonic neuron development, angiogenesis	PDGFR- α , PDGFR- β
PDGF-CC	Fallotein, Spinal Cord-Derived Growth Factor (SCDGF)	Retinal pigment epithelia, fallopian tube, vascular smooth muscle cells in kidney, platelets, prostate, testis, uterus	Mitogenic factor, hyperplasia, cell migration, embryonic development, angiogenesis	PDGFR- α
PDGF-DD	Iris-Expressed Growth Factor (IEGF), Spinal Cord-Derived Growth Factor-B (SCDGF-B)	Heart, pancreas, adrenal gland, ovary, placenta, liver, kidney, prostate, testis, small intestine	Mitogenic factor, hyperplasia, cell migration, embryonic development, angiogenesis	PDGFR- β

TGF- β リガンドのアンタゴニスト

Natural TGF- β Antagonists	Structural Features Contained in the Antagonist Polypeptide (M.W.)	Known TGF- β Binding Partners
Noggin	unique Noggin cysteine knot (26 kDa)	BMP-2, -4, -5, -6, -7, -13/GDF-6, -14/GDF-5
Chordin	4 CR/VWCC (Chordin) domains, 3 SOG repeats (102 kDa)	BMP-2, -4, -7
Chordin-like/Neuralin/Ventropin	3 Chordin domains (51 kDa)	BMP-4, -5, -6
Follistatin	3 cysteine-rich Follistatin (FS) and 3 kazal domains (38 kDa)	Activin, BMP-2, -4, -6, -7, Myostatin/GDF-8, GDF-11, TGF- β ₁
Follistatin-like related gene (FLRG)	2 FS and 2 kazal domains (28 kDa)	Activin, BMP-6, -7, -11, Myostatin/GDF-8, GDF-11, TGF- β ₁
GASP-1	1 Wap, 1 FS, 1 kazal, 1 IG-like, 2 kunitz, 1 netrin domains (63 kDa)	Myostatin/GDF-8, GDF-11, Activin, BMP-11
Follistatin-related protein (FSRP)	1 FS, 1 CR/VWRC, 2 EF-hand domains (35 kDa)	Activin, BMP-2, -6, -7
DAN	unique DAN cysteine knot (19 kDa)	BMP-2, -4, -7, -14/GDF-5
Cerberus	DAN-like cysteine knot (30 kDa)	BMP-2, -4, -7, Activin, Nodal
Gremlin	DAN-like cysteine knot (21 kDa)	BMP-2, -4, -7
Sclerostin/SOST	unique Sclerostin cysteine knot (24 kDa)	BMP-5, -6, -7
Decorin	multiple leucine-rich repeats (40 kDa)	TGF- β -1, -2
alpha-2 macroglobulin	multiple proteinase inhibitor domains (163 kDa)	TGF- β -1, -2, Activin, Inhibin

血漿リポタンパク質の一般的特徴

LP Particle	Size	Density (g/ml)*	TG/CE Ratio*	L/P Ratio*	Associated Apoproteins
CM	1000nm	<0.95	28.83	65.66	ApoB-48 , ApoA, ApoC, ApoE, ApoH
VLDL	70nm	0.98	3.89	10.76	ApoE , ApoB-100, ApoC
IDL	40nm	1.01	0.82	8.09	ApoE , ApoB-100, ApoC
LDL	20nm	1.04	0.18	3.76	ApoB-100 , ApoC, ApoE, Apo(a)
HDL	10nm	1.13	0.16	1.22	ApoA-I , ApoC, ApoD, ApoE

LEGEND: * Average values, TG-triglycerides, CE-cholesteryl esters, L/P- lipid/protein, **Bold** represents the major apoprotein

アポタンパク質の分類

Apoprotein	MW	Function and Comments
ApoA-I	29 kDa	Major protein of HDL, activates LCAT, high levels of ApoA-I are associated with a reduced risk of CHD.
ApoA-II	17.4 kDa	Primarily in HDL, inhibits hepatic lipase activity.
ApoA-IV	46 kDa	Present in fat-rich LPs.
ApoB-48	246 kDa	Derived from ApoB-100 gene by RNA editing, found exclusively in CMs, lack the LDLR binding domain of ApoB-100.
ApoB-100	513 kDa	Major protein of LDL, binds to LDLR, high levels of ApoB-100 are associated with an increased risk of CAD.
ApoC-I	7.6 kDa	Appears to be involved in activation of LCAT.
ApoC-II	8.9 kDa	Activates LPL, deficiency of ApoC-II results in accumulation of CMs and high TG levels.
ApoC-III	8.75 kDa	Inhibits LPL.
ApoD	33 kDa	Found only in HDL, closely associated with LCAT.
ApoE	34 kDa	Three known ApoE alleles (E2, E3, E4). Binds to LDLR, inhibits development of atherosclerosis, ApoE4 is associated with late-onset Alzheimer's disease.

Note: Tables found on pages 136-144 are reflective of current knowledge.

一般的な略号

AA (aa)	Amino Acid
AAP	Antigen-Affinity Purified
ABTS	azino-diethylbenzothiazoline-sulfonate
AEC	3-amino-9-ethylcarbazole
AP	Alkaline Phosphatase
AR	Antigen Retrieval
bME	beta-Mercaptoethanol
BSA	Bovine Serum Albumin
Bt	Biotinylated
CHO	Chinese Hamster Ovary (cells)
ConA	Concanavalin A
Da	Daltons
DAB	3,3' Diaminobenzidine
DI	Deionized
DMEM	Dulbecco's Modified Eagle's Medium
DMSO	Dimethyl Sulfoxide
DTT	Dithiothreitol
ECM	Extra Cellular Matrix
ED ₅₀	50% Effective Dose
EDK	ELISA Development Kit
EIA	Enzyme Immunoassay
EIER	Enzyme-Induced Epitope Retrieval
ELISA	Enzyme-Linked Immunosorbent Assay
ESC	Embryonic Stem Cells
EU	Endotoxin Unit
FACS	Fluorescence-Activated Cell Sorter
FBS	Fetal Bovine Serum
FCS	Fetal Calf Serum
FFPE	Formalin-Fixed Paraffin-Embedded
FLISA	Fluorescence-linked Immunosorbent Assay
Gt	Goat
HCl	Hydrochloric Acid
HEK293	Human Embryonic Kidney Cells
HIER	Heat-Induced Epitope Retrieval
HoAc	Acetic Acid
HPLC	High-Performance Liquid Chromatography
HRP	Horseradish Peroxidase
HSA	Human Serum Albumin
HSC	Hematopoietic Stem Cells

HUVEC	Human Umbilical Venous Endothelial Cells
ICC	Immunocytochemistry
IgG	Immunoglobulin G
IgE	Immunoglobulin E
IHC	Immunohistochemistry
IU	International Unit
kDa	kilodaltons
LAL	Limulus Amoebocyte Lysate assay
LPS	Lipopolysaccharide
MAb	Monoclonal Antibody
MW	Molecular Weight
MSC	Mesenchymal Stem Cells
NaP	Sodium Phosphate (NaPO ₄)
NFDM	Nonfat Dry Milk
NKC	Natural Killer Cells
NM	Nitrocellulose Membrane
NSC	Neural Stem Cells
O.D.	Optical Density
PAb	Polyclonal Antibody
PAGE	Polyacrylamide Gel Electrophoresis
PCR	Polymerase Chain Reaction
PBL	Peripheral Blood Lymphocytes
PBS	Phosphate Buffered Saline
PBST	PBS with 0.1% TWEEN-20
PBMC	Peripheral Blood Mononuclear Cells
PHA	Phytohemagglutinin
pI	Isoelectric Point
PIER	Protease-Induced Epitope Retrieval
Rb	Rabbit
RIA	Radioimmunoassay
RT	Room Temperature
SDS	Safety Data Sheet
SDS	Sodium Dodecyl Sulfate
TBS	Tris Buffered Saline
TFA	Trifluoroacetic Acid
TMB	3,3',5,5'-tetramethylbenzidine
WB	Western Blot
WFI	Water Force Injection
WHO	World Health Organization

RUO サイトカイン FAQ

各製品に関する情報は、一緒にお届けする試験成績書 (Certificate of Analysis) に記載されています。溶解と貯法に関しては、この試験成績書を必ずお読みください。試験成績書をお読みになったうえで、さらに不明な点がある場合は、下記の FAQ をお読みいただくか、当社テクニカルサポートまでお問い合わせください。

1. ペプロテックのタンパク質製品の安定性について何を知っておくべきでしょうか？

試験成績書に特に記載のない限りは、当社のどの製品も凍結乾燥したタンパク質が室温で高い安定性を示すような組成になっています。ただし、凍結乾燥製品は -20℃～-80℃で保存することを推奨します。

大部分の製品で調製後の溶液は短期間であれば 4℃で保存することを推奨します。長期保存の場合には、タンパク質溶液は実用量に分注し、キャリアタンパク質（例：0.1% BSA）を添加して -20℃～-80℃で凍結保存してください。分注したタンパク質溶液は、1μg/mL 以上の濃度（濃度にかかわらず 10μL 以上の液量）に調製してください。

凍結融解サイクルを経ることにタンパク質の変性が生じるおそれがあるので留意が必要です。

2. ペプロテックのタンパク質の購入時のエンドトキシンレベルについて教えてください。

ペプロテックの動物由来成分不含サイトカインにおけるエンドトキシン濃度は、タンパク質 1μg あたり 0.01ng もしくは 0.1EU 未満であることが保証されています。また、非動物由来成分不含サイトカインについては、そのほとんどで 1μg あたり 0.1ng 未満もしくは 1EU 未満のエンドトキシン濃度であることが保証されています。ただし、弊社の多くのタンパク質では、エンドトキシン濃度の実測値は常に上記のエンドトキシン濃度より低くなります。詳しくは当社テクニカルサポートまでお問い合わせください。

3. バイアル中にタンパク質のベレット（パウダー）が確認できないのはなぜですか？

市販されている多くのタンパク質製品とは異なり、ペプロテックの製品はキャリアタンパク質や他の添加物（例：BSA、HSA、ショ糖）が使用されておらず、多くの場合最低限の量の塩類と共に凍結乾燥されています。そのため、凍結乾燥の際、バイアル内には目に見えないこともあるほどの薄い層になってわずかな量のタンパク質が沈着する可能性があります。開栓前に卓上型遠心分離器で各バイアルを 20～30 秒間遠心し、キャップやバイアル内壁に付着している可能性のあるタンパク質をバイアル底部に集めることを推奨します。当社の品質管理手順によって、各バイアルに適正量の製品が充填されていることを保証しています。

4. ED₅₀ で表される活性と units/mg で表される比活性にはどのような関係があるのでしょうか？

活性が最大反応の 50% に達するサイトカイン濃度が ED₅₀ と定義されます。この効力の表現方法は、用量反応曲線がシグモイド曲線になるサイトカインにのみ用います。ED₅₀ (ng/mL) で表される活性から units/mg で表される比活性に変換する公式は次のとおりです。

$$\frac{1 \times 10^6}{\text{ED}_{50} \text{ (ng/mL)}} = \text{比活性 (units/mg)}$$

5. 種間交差活性を示すサイトカインはどれですか？

多少の例外はありますが、大部分のヒトサイトカインはマウス細胞で活性を示します。多くのマウスサイトカインは、ヒト細胞で活性を示しますが、対応するヒトサイトカインと比べて比活性が低くなります。IL-7 などの幾つかのヒトサイトカインは、対応するマウスサイトカインと比べて、マウス細胞ではさらに高い比活性を示します。インターフェロン、GM-CSF、IL-3、IL-4 は、種特異的であり、異種細胞に対しては示したとしてもほんのわずかな活性しか示さないことが明らかになっています。これに対し、FGF およびニューロトロフィン、非常に高度に保存されており、他の動物種の細胞に対して優れた活性を発揮します。

GMP サイトカイン FAQ

1. 治験薬の GMP 製造や市販用治療製品の製造に PeproGMP® サイトカインを使用することはできますか？

はい。PeproGMP® サイトカインは、細胞治療製品、遺伝子治療製品、組織工学製品、複合製品、他の先端医療医薬品などの治験薬や市販の臨床用製品の GMP 製造への使用を目的としています。

ただし、PeproGMP® サイトカインは治療薬でも医薬品添加物でもないため、ヒトへの直接投与はできません。詳細については、USP (米国薬局方) <1043> Ancillary Materials for Cell, Gene, and Tissue-Engineered Products (細胞、遺伝子および組織工学製品の製造関連物質) をご覧いただくか、当社テクニカルサポートまでお問い合わせください。

2. PeproGMP® サイトカインのリスク分類はどのようになっていますか？

USP <1043> に基づき、PeproGMP® サイトカインは Tier 2 に分類されます。

Tier 1：低リスク、高度な評価がなされたもの（治療用医薬品または生物製剤、医療機器）

Tier 2：低リスク、製造関連物質としての用途を持ち、GMP に従って製造され、十分に特性解析されたもの

Tier 3：中リスク、製造関連物質としての用途を持たないもの

Tier 4：高リスクなもの

3. PeproGMP® サイトカインの製造施設は US FDA による GMP 認定を受けていますか？ ペプロテックは FDA 査察を受けたことはありますか？ 当社の QA 部門ではペプロテックや PeproGMP® サイトカインの適格性をどのように判断したらいでしょうか？

US FDA は、製造関連物質の製造施設に対しては査察も GMP 認定も行っておりません。一部の国では、その国の規制当局があらゆる種類の製品の GMP 製造に対して査察を行い、認定を行っていますが、FDA による GMP 査察の対象は治療薬と医療機器の製造施設に限られています。

PeproGMP® サイトカインは、厳格な ISO 9001 に適合した品質システムのもと、GMP に準拠して製造されています。製造、試験、ラベル表示、包装のあらゆる面において、当社の QA 部門により厳密に管理、バリデーション、モニタリングが行われています。当社では、PeproGMP® サイトカインのすべての製品において、詳細な試験成績書 (Certificate of Analysis) と原産地証明書 (Certificate of Origin) を提供しています。安全データシート (Safety Data Sheet) もご利用いただけます。

4. PeproGMP® サイトカインは動物由来成分を含まず、ヒト由来成分も含んでいないのでしょうか？

はい。PeproGMP® サイトカインの製造には組成が明らかな培地、酵素、化学物質を使用しており、これらはいずれもヒトを含む動物由来ではありません。

5. PeproGMP® サイトカインは、当社が研究開発に使用し続けているペプロテックの RUO サイトカインと同じ生物学的特性を持つのでしょうか？

はい。PeproGMP® サイトカインは、機能的に対応する RUO サイトカインと同等です。

6. PeproGMP® サイトカインはどのように発送されますか？

PeproGMP® サイトカインは凍結乾燥されており、幅広い温度で安定していますので、周囲温度での発送となります。

ヒトES/iPS 細胞用維持培地 FAQ

1. PeproGrow™ hESC はどのような培地ですか？

PeproGrow™ hESC は、ラトガース大学（アメリカ・ニュージャージー州）Stem Cell Training Course と当社が共同で設計開発した独自組成の培地です。この培地は、血清やフェノールレッドを含んでおらず、化学的組成が完全に明らかな培地で、ヒト ES 細胞およびヒト iPS 細胞の増殖培養への使用を目的としています。この培地は、FGF-basic の他、特異な TGF- β 経路活性化因子（同様の経路を活性化するインスリンの代替）を使用しており、TGF- β 阻害因子は使用していません。

2. PeproGrow™ hESC はどのように保存したらよいですか？

受領後 1 週間以内に使用する場合、基礎培地と成長因子構成成分は 4℃ の暗所に保管してください。1 週間を超えて長期間保管する場合は、基礎培地は 4℃ の暗所で 6 ヶ月間、凍結乾燥された成長因子構成成分は -20℃ で 5 年間まで保管できます。

3. PeproGrow™ hESC はどのように調製したらよいですか？

凍結乾燥された成長因子構成成分をキットのサイズにより細胞培養用滅菌水 100 μ L または 500 μ L で溶解します。バイアルを数分間静置し、数回ゆっくりと転倒混和したあと遠心分離します。培地ボトルに成長因子構成成分の全内容物を無菌的に添加します。混合した日付と新たに算出した使用期限（混合した日から 2 週間）をボトルに表示します。必要時まで 4℃ の暗所で培地を保管し、栄養源の供給に必要な量の培地だけをその都度加温します。

4. 現在使用している培地から PeproGrow™ hESC に切り替えるにはどうしたらよいですか？

馴化ステップを踏まずにすぐに培地を切り替えることができます（迅速プロトコル）。1 週間かけて PeproGrow™ hESC 培地の割合を毎日少しずつ増やしていくことも可能です（馴化プロトコル）。

5. 馴化プロトコルで何か注意すべきことはありますか？

馴化は必須ではありません。細胞は PeproGrow™ hESC にすぐに順応しますので、馴化はお客様の判断で行ってください。馴化プロトコルを使用する場合、念のため、現在使用中の培地で培養を維持してもかまいません。培養を順応させる際、PeproGrow™ hESC に対する現在使用中の培地の比率を少しずつ変える方法も選択できます。繰り返しになりますが、馴化は必須ではありません。平坦化などの形態の変化がみられる場合がありますが、これは心配ありません。他社の培地と比べて培養の外見に若干の違いはみられるかもしれませんが、培養細胞の多能性は維持されます。

6. 馴化中に分化がみられた場合、どうすればよいですか？

ある程度の分化は予想されますので、分化したコロニーを剥がし取るか、新たにコーティングした細胞培養ディッシュに分化していないコロニーを採取して取っておく必要があります。

7. 私の細胞培養は PeproGrow™ hESC で変化しますか？

一部の細胞コロニーの形態に変化が生じる可能性があります。また、いずれのプロトコル（迅速プロトコルまたは馴化プロトコル）を用いた場合でも、培地切り替えの際にある程度の分化がみられる可能性があります。これは想定できないことではありませんので、細胞を洗浄して 3 回まで継代し、反応が不良のコロニーを選び出すことが必要です。推奨プロトコルについては、PeproGrow™ hESC の取扱説明書をご覧ください。

8. 私の細胞培養は PeproGrow™ hESC でどのように変化しますか？

変化を正確に予測することはできませんが、当社では馴化培養液では継代の際にコロニーの弾性がさらに高まることを確認しています。コロニーの弾性をさらに高めるための継代方法に関する詳細情報は、PeproGrow™ hESC の取扱説明書に記載されています。コロニーの質感に変化がみられない場合は、お客様の通常のプロトコルを用いて継続してください。

9. 酵素を用いた継代後に細胞がうまく接着しませんでした、なぜですか？

おそらくコロニーが過剰に消化されたものと考えられますが、残った細胞は捨てないでください。一部のコロニーが接着している場合は、引き続き培養液に栄養源を供給してください。一部の細胞は 4～6 日後に盛んに増殖するため、2～4 個のコロニーから培養を維持することが可能です。また、過剰な消化を回避するために、非酵素継代法の使用を考えてみるのもよいでしょう。

10. 酵素を用いた継代後に細胞がうまく接着しなかった場合、培養に試薬を添加してもよいですか？

2～10 μ M (2 μ M が望ましい) の Y-27632 (ROCK 阻害剤) を添加すると、酵素（ディスパーゼまたは Accutase™）を使用した継代では細胞の生存と接着が向上することが明らかになっています。Y-27632 を増量すると、可逆性が確認されている形態変化の他、神経分化も生じることが明らかになっています。

11. 細胞の継代に関するその他の推奨事項はありますか？

その他の推奨事項は下記のとおりですが、PeproGrow™ hESC の取扱説明書もあわせてご覧ください。

- 継代法で最も難しい部分は適切なタイミングを図ることです。ディスパーゼによるコロニーの過剰な消化を避けることは極めて重要ですが、その理由は、コロニーの過剰な消化によってコロニーが接着しなくなったり、接着後にコロニーが崩壊したりするためです。
- おそらく 5～7 日後には、継代には十分な大きさのコロニーが形成されると思われます。
- ある程度の細胞死は正常の範囲内です。ディスパーゼを用いた継代では、ある程度の割合の細胞が接着しなくなると予測されますが、生存率が 50% を切った場合は、細胞の継代が過酷であったということになります。PBS/EDTA を使用する場合はディスパーゼよりは穏やかな方法となりますので、細胞の継代が正しく行われれば回復性は高くなります。

ヒトES/iPS 細胞用維持培地 FAQ (続き)

12. 細胞の継代のタイミングについて他に推奨事項はありますか？

継代のタイミングは非常に重要です。継代の時期が早すぎると、コロニーが小さくなりすぎ、継代に耐えられなくなるため、細胞がうまくディッシュ培養面を覆いません。また、コラーゲナーゼへの過剰な曝露を避けることも重要です。当社はディスパーゼまたはPBS/EDTAを推奨します。5分あれば最適な状態になりますが、どちらの方法も3分後の時点で細胞を観察し、5分が必要かどうかを判断してください。

13. 細胞密度はコロニーの増殖にどのように影響しますか？

細胞の密度が低すぎたり高すぎたりすると、分化が生じる可能性があります。スプリット比率が高すぎる場合、細胞には生存率を高められるほどの十分な自己分泌因子が存在しないため、多くの細胞が死亡したり分化したりします。コンフルエントに近い状態の培養ディッシュから開始し、ディスパーゼ使用時はスプリット比率として1:6、1:12または1:18を、PBS/EDTA使用時は1:6、1:12、1:18または1:24を試すことを推奨します。必要であればさらに希釈してもかまいません。当社は、低い細胞播種密度においてディスパーゼを使用する際にはY-27632の添加を推奨しますが、PBS/EDTAを使用する際はその必要はありません。

14. 間隔は細胞密度にどのように影響しますか？

間隔の決定は任意です。当社は、細胞を播種する際には、ウェル（6ウェルディッシュのみ）の縁の周りに細胞を置き、その後ディッシュを前後に静かに動かして混合させることを推奨します。その他のサイズのディッシュでは、細胞を添加する際にピペットを動かして細胞を分散させてください。

15. 細胞への栄養源の供給に関して、何か推奨事項はありますか？

週末にかけて2倍量の栄養源を1回分として供給する場合を除き、細胞には毎日栄養源を供給してください。

16. 細胞培養ディッシュのコートニングに推奨されるMatrigel® (Corning社) 以外のマトリックスを使用してもよいですか？

はい。当社ではLaminin/Entactin、Synthemax® II（ともにCorning社）、組換えヒトビトロネクチン（当社）を含めその他のコートニング試薬を試しました。Laminin/Entactinでは、標準的なプラスチック製細胞培養ディッシュでMatrigel®とほぼ同じ増殖がみられました。ヒトビトロネクチンとSynthemax® IIでは、因子を最適に結合させるため、CellBIND® (Corning社) またはそれと同等のプラスチック製細胞培養ディッシュを推奨します。この方法では、コロニーの広がりや数が少なく、接着性もわずかに弱かったため、さらに時間をかけてY-27632を添加する必要があると思われます。

動物由来成分不含培地添加剤キット FAQ

1. 化学的組成が明らかな無血清培地とは何ですか？

化学的組成が明らかな培地は、分子の構造と濃度が明らかになっている成分のみ含有しています。

2. ペプロテックの動物由来成分不含培地添加剤キット PeproGrow-1 にはタンパク質は使用されていますか？

いいえ。当社の動物由来成分不含培地添加剤キットには、動物由来成分が使用されていないばかりでなく、タンパク質も使用されていません。

3. 化学的組成が明らかな無血清培地を使用することの利点は何ですか？

次のような利点があります：「ロット間の変動が減り、細胞増殖の再現性が高い」、「血清を添加した場合と比べてタンパク質収量が高い（タンパク質産生アプリケーションの場合）」、「一定した性能の培地が得られる」、「ウイルスや他の感染物質による汚染リスクを低減できる」、「ダウンストリーム精製の困難が軽減される（タンパク質産生アプリケーションの場合）」、「血清ロットの事前スクリーニングの必要がなくなる」、「規制要件や他の添付書類要件が簡素化される」。

4. PeproGrow-1 に関して動物由来成分不含の証明書は提供していただけますか？

はい。当社テクニカルサポートまでお問い合わせください。

5. PeproGrow-1 の組成をどこで見ることができますか？

当社は本キットの組成を開示しておりません。

6. DMEM/F12培地の代わりにDMEM培地を使用することはできますか？

DMEM/F12培地は、DMEM培地の半分量とF12培地の半分量を混合したものであるため、DMEM培地のみと比べて栄養価が大幅に高くなっています。当社では現時点ではDMEM培地の試験は行っていないため、PeproGrow-1はDMEM/F12培地に使用することを推奨します。

抗体の抗原親和性精製

サイトカインは、体の中での細胞間の情報伝達に必要なシグナル伝達タンパク質です。生体の生物学的機能の維持における役割と一致し、様々な哺乳類に由来する相同サイトカインのアミノ酸配列が一般に高度に保存されているため、これらのサイトカインは抗体産生のための免疫原性が低くなります。

その結果、サイトカインで免疫を誘導した宿主動物の血清（図 I-1）が含有するサイトカイン特異抗体は通常微量です。これらの抗体を標準的な精製手順（例：イオン交換クロマトグラフィー法）で分離するのは単調な作業となり効率的ではありません。一方、特定の生体分子に対する抗体の結合親和性を利用した精製プロトコルでは大幅に良好な結果が得られています。

例えば、プロテイン A とプロテイン G は、細菌（ブドウ球菌）由来タンパク質で免疫グロブリン（IgG）の Fc

（Fragment crystallizable）領域に対して高い結合親和性を示し、固相支持体に結合させると IgG を他の血清成分から効率的に分離することができます。血清 IgG のプロテイン A/G 親和性精製により、通常、目的の抗体が 100 倍以上増加します。しかし、抗サイトカイン抗体の場合には、総 IgG 分画における目的の抗体の含有率は 0.2% 未満になることが多々あります。

これらの試料中に無関係な IgG が多量に含まれていると、サイトカイン特異抗体の相対量の定量が妨げられるだけでなく、抗体を ELISA、中和試験、免疫組織化学、ウェスタンブロット法などの分析法に使用する場合にバックグラウンドノイズが大きくなります。抗血清から特異的ポリクローナル抗体を分離する優れた方法は、抗体-抗原相互作用の特異性を利用したアフィニティクロマトグラフィー法です（図 I-2）。

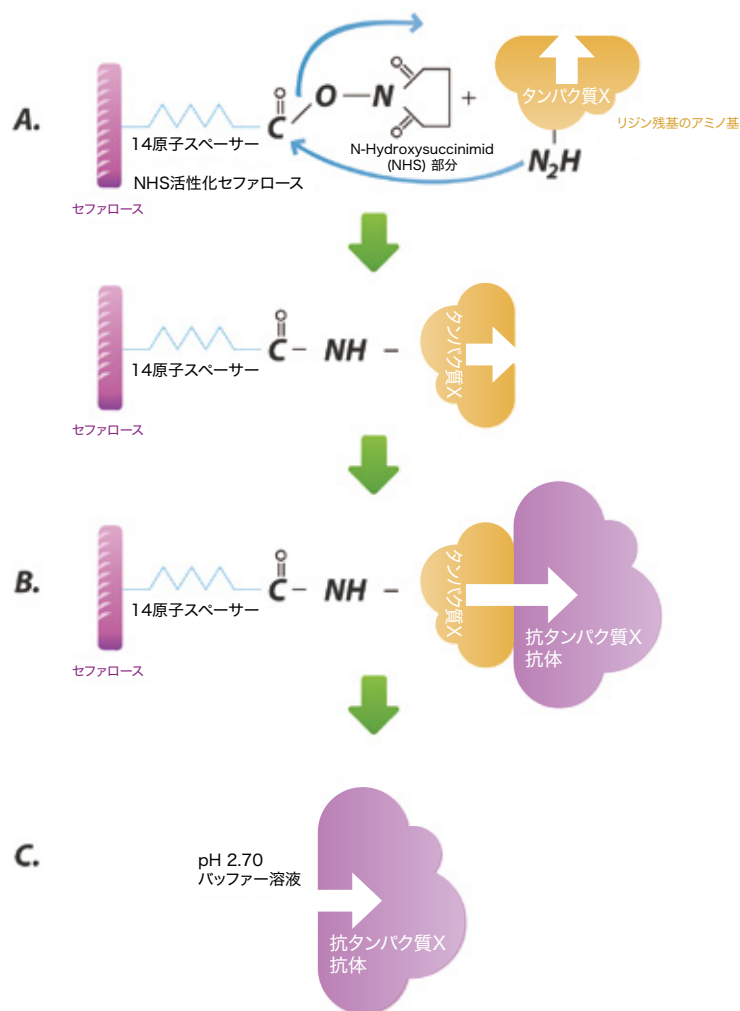
図 I-1 ウサギを用いたポリクローナル抗体産生のための一般的な免疫付与スケジュール

日	手順	抗血清採取量
1	前採血	3mL
1	初回免疫付与（250μg）	-
21	免疫付与（125μg）	-
31	抗体価測定用の採血	3mL
42	免疫付与（125μg）	-
49	産生用の採血	10-25mL
56	産生用の採血	10-25mL
63	免疫付与（125μg）	-
70	産生用の採血	10-25mL
77	産生用の採血	10-25mL
84	免疫付与（125μg）	-
91	産生用の採血	10-25mL
98	産生用の採血	10-25mL

抗体の抗原親和性精製 (続き)

図 I-2 抗体の抗原親和性精製

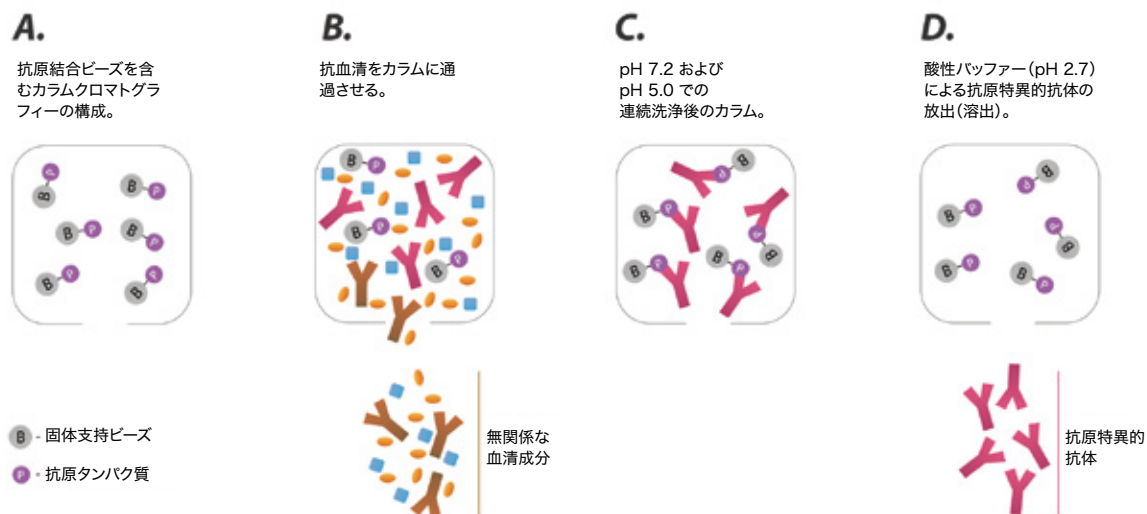
- (A.) 分離用樹脂の調製
 (B.) 抗体と樹脂の特異的結合
 (C.) 親和性カラムからの抗体の pH 溶出



この方法では、担体は、抗原が安定した共有結合によって結合する固相支持樹脂から構成されます。固定化した抗原をその後カラムクロマトグラフィー法の構成に使用すると、抗原特異的抗体は選択的に捕捉され、他の血清タンパク質および無関係の免疫グロブリンは洗い流されます (図 I-3)。

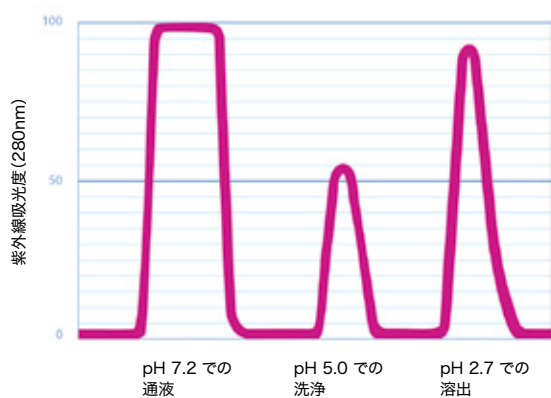
抗原と結合した抗体は酸性溶液でカラムから溶出させることが可能で (図 I-4)、この溶液を速やかに生理的 pH に戻すと酸触媒による抗体変性を防ぐことができます。この方法による収量の 95% 超は純粋な特異抗体になります (図 I-5)。

図 I-3 抗体の抗原親和性精製のためのカラムクロマトグラフィー法の構成の概略図

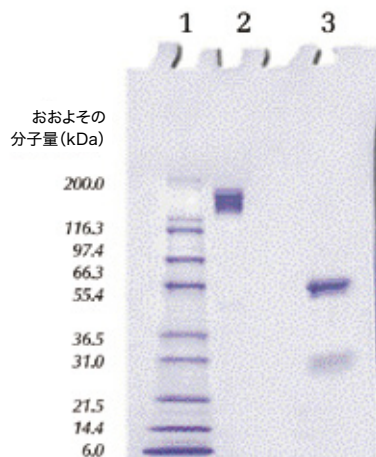


注: 1M NaOHを添加して溶出pHを7.2に調節する。

図 I-4 典型的な抗原親和性精製クロマトグラフ

図 I-5 ウサギ抗ヒト IL-8 ポリクローナル抗体 (Rb α hIL-8) の SDS-PAGE 分析

レーン 1 : 分子量マーカー
レーン 2 : Rb α hIL-8, 2 μ g (非還元)
レーン 3 : Rb α hIL-8, 2 μ g (還元)



抗体 FAQ

1. ペプロテックでは自社の抗体にエンドトキシン試験を行っていますか？

当社では LAL カイネティック法で抗体のエンドトキシン試験を行っています。詳しい情報は当社テクニカルサポートまでお問い合わせください。

2. ペプロテックのポリクローナル抗体のアイソタイプは？

当社が製造するポリクローナル抗体は IgG 抗体です。

3. ペプロテックの抗体はどのように精製していますか？

すべてのポリクローナル抗体とビオチン化ポリクローナル抗体に対して、抗原親和性精製を行っています。モノクローナル抗体の精製法は製品毎に違いますので、詳しい情報はテクニカルサポートまでお問い合わせください。

4. ペプロテックの抗体が結合するエピトープについて教えてください。

当社は現時点ではエピトープマッピングを実施していません。一般的な指針として、モノクローナル抗体は標的タンパク質の特定のエピトープに結合しますが、ポリクローナル抗体の場合は様々な抗体分子種の混合物となるため、複数のエピトープに結合します。

5. ペプロテックの抗体は中和試験を行っていますか？

中和試験は抗体毎にロットベースで実施しています。中和試験の結果は製品の該当データシートに記載されています。

6. ペプロテックの抗体は ELISA 法やウェスタンブロット法での使用に適していますか？

当社の抗体は ELISA 法やウェスタンブロット法での使用に適しています。これらの用途に関する詳しい情報は、ELISA とウェスタンブロット法のそれぞれの FAQ をご覧ください。

7. ペプロテックの抗体製品の安定性についてどのような情報を知っておくべきでしょうか？

当社の抗体は PBS から調製されている凍結乾燥品です。そのため、室温で少なくとも 1 ヶ月間は安定しています。1 ヶ月を超える場合には、凍結乾燥品は -20°C ~ -80°C で保存することを推奨します。

調製後の抗体溶液は、4°C での短期保存を推奨します。長期保存する場合には、まず抗体溶液を分注し（凍結融解サイクルを 2 回以上繰り返さないため）、-20°C ~ -80°C で凍結保存してください。この抗体溶液の凍結アリコートは、-20°C ~ -80°C で保存すれば少なくとも 6 ヶ月間は安定しています。

8. ペプロテックの抗体製品はキャリアタンパク質や他の添加物を含有していますか？

いいえ。当社では、ポリクローナル抗体、ビオチン化ポリクローナル抗体またはモノクローナル抗体に添加物やキャリアタンパク質は使用していません。

9. ペプロテックの抗体は免疫組織化学や免疫細胞化学に役立ちますか？

現在までに試験済みのどの抗体もこれらの用途に適していることが明らかになっています。詳しい情報は当社テクニカルサポートまでお問い合わせください。

10. ペプロテックの抗体は他社が販売している標的タンパク質を認識しますか？

当社の抗体製品は、天然型あるいは組換え型、またはその両方のタンパク質に対して高い結合親和性を示します。しかし、他社のタンパク質のなかには時として真正性が欠けることもあるため、当社の抗体がこれらのタンパク質で同じような優れた性能を発揮するということは保証できません。

11. ペプロテックの抗体は血液や血清などの複合体液中の標的タンパク質を認識しますか？

はい。ただし、妨害物質含有量が高い試料では、認識の効率が低下して、バックグラウンドが高くなったりシグナル / ノイズ比が低下したりする可能性があります。

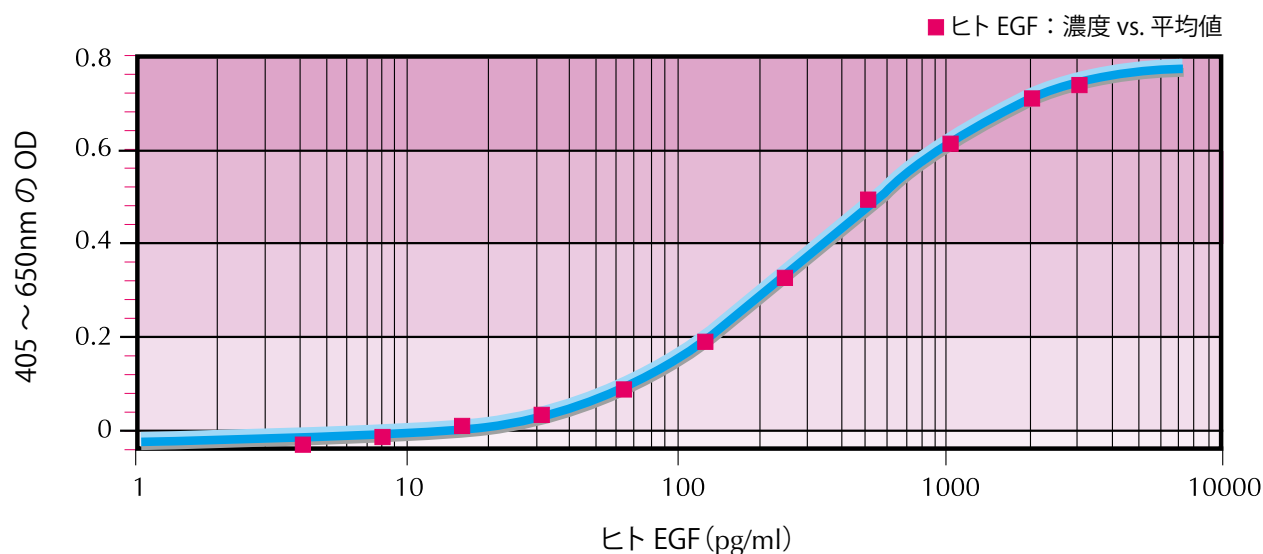
ELISA

酵素免疫測定法（ELISA: Enzyme-linked Immunosorbent Assay）は、細胞溶解液、血清または他の複合溶液中の特定の抗原または抗体の濃度を定量するための検査手法です。最も簡素な、ダイレクト ELISA と呼ばれるフォーマットでは、ポリスチレンプレートなどの固相結合担体を測定対象抗原の捕捉に使用し、その後この抗原を特定の酵素標識抗体を利用して検出します。検出プロトコルでは、無色の基質溶液を、反応プレートで直接測定できる鮮明な色を発する産物に変換する必要があります。反応が起きている間の吸光度の増加を幾つかの試料溶液で様々な時点にて記録し、その後収集したデータを標準曲線とあわせて使用し、元の試料中の抗原濃度を算出します（図 II-1）。ELISA は、感度と特異度が放射免疫測定法（RIA）と同等ですが、放射性同位体と高価な計数装置を必要としないという利点があります。ELISA は研究室と臨床検査室の双方で広く使われるようになっており、ヒト免疫不全ウイルス（HIV）感染をはじめとする多くの感染症の重要な診断検査となっています。

酵素標識抗体の調製に適している酵素は、アルカリホスファターゼ、西洋ワサビペルオキシダーゼ、炭酸脱水酵素を含めて数多くあります。酵素標識抗体はグルタルアルデヒドなどのカップリング剤で酵素と抗体を共有結合させることによって得られますが、この方法では産物の免疫活性と酵素活性の両方またはその一方が低下することが多いために一般には使用されません。完全な活性を示す酵素標識抗体を調製する優れた方法は、図 II-2 に示すようにビオチンに対するアビジンの高結合親和性を利用することです。この方法で用いるビオチン化抗体は平均 6 ～ 8 個のビオチン部分を有していますが、サイズが小さいためにこれらのビオチン部分が抗体と捕捉される抗原の相互作用を妨げることはありません。結合しなかった抗体をプレートから洗い流した後、*in situ* にてビオチン部分とアビジン - 酵素複合体で安定した複合体を形成させます。

ダイレクト ELISA フォーマットの大きな欠点として、一部の抗原（例：低分子サイトカイン）はポリスチレン

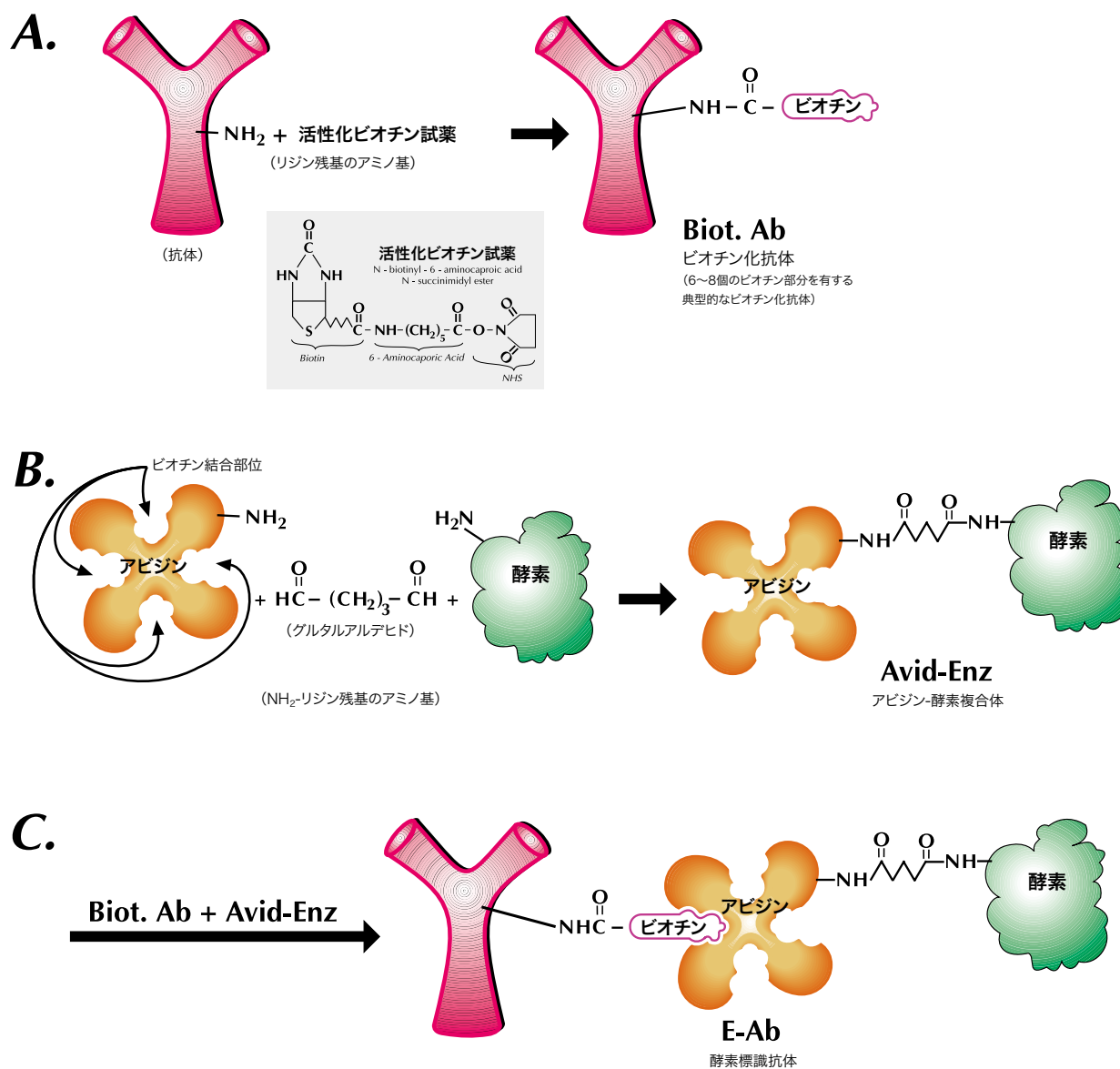
図 II-1 標準曲線の見本 - ヒト EGF ABTS ELISA



ELISA (続き)

図 II-2 アビジン - ビオチン相互作用を利用した酵素標識抗体の作製手順

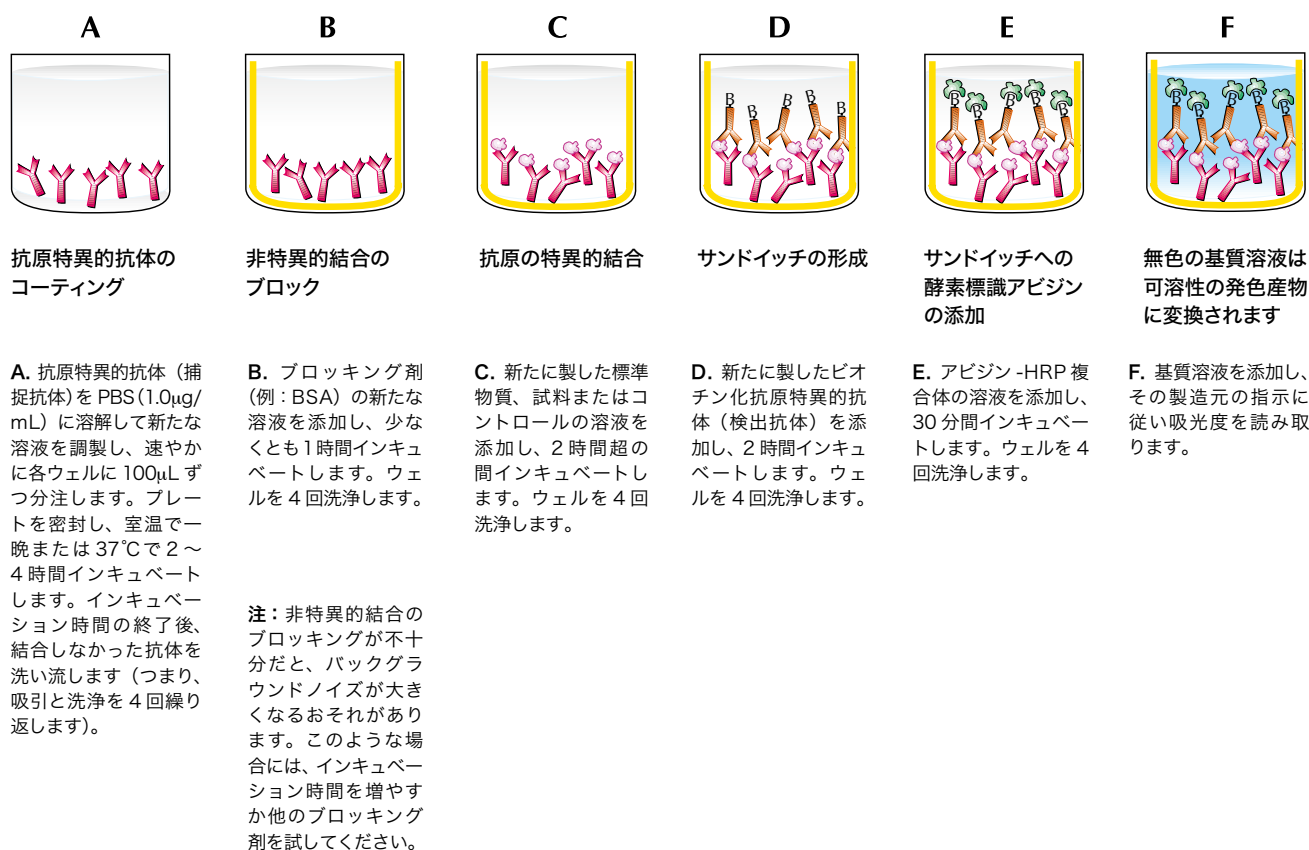
(A.) 抗体のビオチン化 (B.) アビジンと酵素の抱合反応
(C.) アビジンとビオチンの非共有結合性相互作用による酵素標識抗体の *in situ* 形成



プレートへの結合が少ないために正確に測定することができません。この欠点を回避するために、プレートは、酵素標識抗体が使用しないエポキシで測定対象抗原を認識する特異的抗体によってあらかじめコーティングすることができます。抗原特異的抗体の対応対（一方は捕捉用、他方は検出用）を用いると、分析の感度と特異度の双方

が著しく向上します。このサンドイッチ ELISA と呼ばれるフォーマットは、ピコグラム単位の量の抗原を検出することができ、生体試料中のサイトカインおよびホルモンの測定に好ましい方法です（図 II-3）。

図 II-3 サンドイッチ ELISA プロトコルの概略図



注：特に指定がない限り、ELISA プロトコルは周囲温度で実施します。

ELISA FAQ

1. ペプロテックの ELISA Development Kit (EDK) に含まれている HRP 複合体の安定性は？

ABTS EDK に含まれているアビジン-HRP は、2 ~ 8°C で最長 1 ヶ月間、-20°C で最長 2 年間安定しています。

TMB EDK に含まれているストレプトアビジン-HRP は、2 ~ 8°C で少なくとも 6 ヶ月間安定しています。

2. キットの交差反応性についての情報はどのように入手することができますか？

ペプロテックでは EDK の交差反応性試験を社内で行っています。この試験で得られた結果はキットのデータシートに記載されています。

3. ELISA プロトコルの中で週末の間に残しておくことのできる手順はありますか？

プレートは、金曜日に捕捉抗体でコーティングし、週末の間は 4°C を保ち、月曜日に再開してもかまいません。注：インキュベーション時間を変更すると、プレート間の結果にバラツキが生じるおそれがあります。

4. ペプロテックの EDK はすべての種類の試料で使用するのに適していますか？

当社は利用可能な各マトリックスですべてのキットを試験したわけではありませんが、血清、血漿、細胞培養上清、尿、唾液等のマトリックスなどでの使用には適していると思われます。

5. 反応を停止させるために反応停止液は必要ですか？

ABTS EDK (アビジン-HRP + ABTS) には反応停止液は必要ありません。信頼性の高い標準曲線は一般に、O.D. 読み取り値がゼロ標準濃度の場合には 0.2 単位、または最高標準濃度の場合には 1.2 単位を超えないときに得られます。反応停止液を希望する場合には、1% ドデシル硫酸ナトリウム (SDS) を使用して反応を停止させてもかまいません。文献からは SDS が ABTS に対する最適な反応停止液であることが示されていますが、当社のラボでは反応停止液を使用していません。

一方で、TMB EDK (ストレプトアビジン-HRP + TMB) には反応停止液 (1M HCl) の使用を推奨します。

6. ペプロテックの TMB EDK では推奨される補正波長 620nm に加えて、他の波長は使用できますか？

TMB EDK では、540nm、570nm または 650nm を補正波長として使用できます。

7. ペプロテックの ABTS EDK に TMB を使用することはできますか？

当社の ABTS EDK は、ABTS を使用して最適化されているため、この基質と一緒に使用するのが最も好ましいと思われます。しかし、このキットは、幾つか調整を行った後であれば TMBと一緒に使用することもできます。

- キットに含まれているアビジン-HRP は TMB と一緒に使用することができません。ストレプトアビジン-HRP を別途購入する必要があります。
- ストレプトアビジン-HRP 希釈液を最適化する必要があります。
- ストレプトアビジン-HRP と TMB を一緒に使用する場合には一般に、反応停止液が必要です。製造元のデータシートをご参照ください。
- 反応停止液添加前の TMB 反応時間を最適化する必要があります。
- プレートは、推奨プレートを使用する場合には 450nm (620nm で補正) で読み取りを行ってください。

8. D-マンニトールを EDK の構成成分に添加している理由は何ですか？

D-マンニトールを EDK の構成成分に添加しているのは、バイアル内のタンパク質 / 抗体の可視化に役立つためです。D-マンニトールは ELISA の結果には影響しません。

9. EDK データシート上の曲線を自分の標準曲線として使用することはできますか？

標準曲線は ELISA プレート毎に作成しなくてはなりません。つまり、あるプレートから得られた曲線を別のプレートに使用することはできません。当社が EDK データシート上で提供している曲線は、当社のラボで得られたものですが、あくまで実証用として使用しています。

10. ペプロテックは標準曲線をどのように作成していますか？

当社のラボで ELISA を実施する場合は、Molecular Devices 社のプレートリーダーおよび SoftMax® Pro ソフトウェアを使用しています。このプログラムは、受け取った値から 4-パラメータの曲線を作成します。プログラムが使用する等式は次のとおりです。

4-P フィットティング：

$$y = \frac{A-D}{1 + \left(\frac{x}{C}\right)^B} + D$$

x = 濃度 (pg/mL)

y = O.D. (405nm - 650nm)

A、B、C、D は 4 つのパラメータに対応 *

* パラメータに関する詳しい情報は当社テクニカルサポートまでお問い合わせください。

ELISA トラブルシューティングガイド

トラブルに対処する場合には、バッファーはすべて新しく用意してください。BSA 含有バッファーは滅菌ろ過し、全ての試薬は使用する前に室温になっているようにしてください。

問題	考えられる原因	提案
バックグラウンドが高い／非特異的な発色が起こる	抗体の非特異的な結合がみられる	使用するブロッキングバッファーを変えてください（例：BSA の代わりにカゼインを使用）。ブロッキングステップの後に洗浄せず、中身を廃棄し、しっかりと水分を取り除いて次のステップに直接進んでください。
	プレートの洗浄が不十分である	各洗浄ステップですべてのウェルがバッファーで満たされていることを確認してください。洗浄器具が適切に作動していることを確認してください。ステップとステップの間で 3 ～ 5 回の洗浄を行ってください。追加の洗浄はしないでください。最後の洗浄の後には、プレートに残留しているバッファーをペーパータオルでしっかり吸い取って除去してください。洗浄液に添加した Tween の量に間違いがないことを確認します (0.01 ～ 0.1% が推奨されます)。
	バッファーの汚染が生じている	すべてのバッファーを新たに製し（使用の 7 日以内）、滅菌ろ過してください。
	インキュベーション温度が高すぎる	手順の最初から最後まで室温（25℃）でインキュベートしてください。
	インキュベーション時間が長すぎる	インキュベーション時間を短縮してください。
	複合体による基質の汚染または陽性コントロールによるブランクウェルの汚染	試薬から試薬に移動するときにはピペット先端を交換し、別個のリザーバを使用してください。洗浄バッファーは吸引するのが理想です（注いだり、傾けて廃棄したりすると交差汚染を引き起こすおそれがあります）。
	検出抗体またはアビジン-HRP/ストレプトアビジン-HRP の濃度が高すぎる	算出値をチェックするか、さらに希釈を試みてください。
	使用前に基質を光に曝露した	ウェルに分注する用意ができるまで基質は暗所で保存してください。
	読み取りの際に間違ったフィルタを使用した	推奨プレートを使用する場合の波長は、ABTS では 650nm で波長補正し 405nm とし、TMB では 620nm で波長補正し 450nm とします。
	発色に必要な時間を過ぎてから測定した	ブランクの O.D. 読み取り値をモニタリングするために、推奨された時間、または時間間隔で読み取ってください。
発色が弱い / 発色しない	誤って使用しなかった試薬や省いた手順がある	プロトコルをチェックし、注意深く手順に従ってください。
	洗浄バッファー中の界面活性剤濃度が高すぎる	界面活性剤を除去するか減量してください（0.01 ～ 0.1% を推奨します）。
	プレートの洗浄が不適切である	特に自動または半自動の洗浄装置を使用しない場合には、ステップとステップの間の洗浄回数を減らしてください。1 ～ 2 回の洗浄で十分と考えられます。
	試料中に酵素阻害剤が含まれている	アジ化ナトリウムはペルオキシダーゼ活性を阻害します。
	インキュベーションの時間や温度が不適切である	プロトコルの推奨事項をチェックしそれに従ってください。インキュベーション中はプレートをインキュベータ内に入れておき、温度の変動を避けてください（温度は 25℃ に設定します）。
	ウェルへの基質の添加量が不適切である	ピペットをチェックし、目盛り付きピペットを使用してください。
	不適切な酵素 - 基質系を使用している	製造元の規格をチェックしてください。アビジン-HRP+ABTS またはストレプトアビジン-HRP+TMB。

ELISA トラブルシューティングガイド (続き)

問題	考えられる原因	提案
発色が弱い / 発色しない (続き)	複合体または基質が活性を示さない	• 別の試験系で活性を測定し、使用期限をチェックしてください。
	構成品の保存が不適切である	• どの構成品もデータシートの推奨どおりに保存してください。
	測定時に間違ったフィルタを使用している	• 推奨プレートを使用する場合の波長は、ABTS では 650nm で波長補正し 405nm とし、TMB では 620nm で波長補正し 450nm とします。
標準曲線が妥当でない	標準物質の調製が正しく行われていない	• 標準物質はデータシートの推奨どおりに調製してください。別のバッファーが最適化されていない限り、推奨の希釈バッファーのみで希釈を行ってください。
	希釈を行うのが早すぎる	• 試薬は使用直前に調製し、速やかにウェルに添加してください。
	捕捉抗体が結合しなかった	• ELISA に適したプレート（つまり、Nunc MaxiSorp™ 製品番号 439454、または Corning 社 製品番号 3590）を使用してください。組織培養プレートを使用してはいけません。
	洗浄が不十分である	• 洗浄器具が適切に作動していること（つまり、各ウェルへの分配量が均等であること）を確認してください。吸引後にはウェルに液残りがいないことを確認してください。ウェルが適時に満たされていることを確認してください。
	ピペッティングエラー	• 目盛り付きピペットを使用し、各ウェルの側面に同じように速やかに分注してください。
	発色に必要な時間を過ぎてから測定した	• 信頼性の高い標準曲線は一般に、ABTS EDK では O.D. 読み取り値がゼロ標準濃度の場合には 0.2 単位、または最高標準濃度の場合には 1.2 単位を超えないときに得られ、TMB EDK では O.D. 読み取り値がゼロ標準濃度の場合には 0.15 単位を超えないときに得られます。
	構成品の保存が不適切である	• どの構成品もデータシートの推奨どおりに保存してください。調製後の試薬はあまりに長い時間室温に放置してはいけません。
精度が不良である	試薬の混和が不十分である	• 分注前に試薬が十分に混和されるようにしてください。
	洗浄が不十分である	• 洗浄器具が適切に作動していること（つまり、各ウェルへの分配量が均等であること）を確認してください。吸引後にはウェルに液残りがいないことを確認してください。ウェルが適時に満たされていることを確認してください。
	ピペッティングエラー	• 目盛り付きピペットを使用し、各ウェルの側面に同じように速やかに分注してください。
	器具の再使用	• アンプルからアンプルに移動するときにはピペット先端を交換し、試薬から試薬に移動するときにはリザーバを交換し、インキュベーションの間にはプレートシーラーを交換してください。
	ウェルをピペット先端または洗浄器具で引っ掻いてしまった	• 分注および吸引は注意して行ってください。
	試料中の沈澱物	• バイアルは使用前に遠心してください。
	ウェルの汚れや残屑	• 使用前にウェルを点検し残屑があれば取り除いてください。プレート底部を拭き、測定前に残屑や指紋があれば除去してください。
エッジ効果	蒸発	• 各ステップでプレートシーラーを使用してください。
	温度にむらがある	• インキュベーション中はプレートをインキュベータ内に入れておき、温度の変動を避けてください（温度は 25°C に設定します）。プレートを積み重ねてはいけません。

ウェスタントランスファー法（ウェスタンブロット法）FAQ

1. ペプロテックのウェスタントランスファー法プロトコルに従った場合、免疫染色の所要時間はどのくらいになりますか？

ウェスタントランスファー法のプロセスには、タンパク質の転写からバンドの可視化まで約 6 時間を要します。

2. どの種類の分子量マーカースを使用すべきですか？

当社では、Novex® Sharp Protein Standard を社内で実施するすべてのウェスタントランスファー法に使用しています。ただし、この分子量マーカースを使用しなくてはならないということではありません。しかし、ECL 検出法を用いない場合には、着色済み分子量マーカースを使用する必要があります。

3. ウェスタントランスファーで陽性コントロールの添加は必要ですか？

はい。ウェスタントランスファーで目的のタンパク質をどのように可視化されるのかを正確に知るためには、ゲルに陽性コントロールを添加しなくてはなりません。ウェスタントランスファー法に当社の抗体を使用する場合には、その抗体に対する免疫抗原である当社の組換えタンパク質の使用を推奨します。

4. ペプロテックのウェスタントランスファー法プロトコルで推奨されている発色システムを使用しなくてはならないのでしょうか？

いいえ。ウェスタントランスファーの可視化に使用できる数多くのいろいろな発色システムがあります。ただし、酵素標識抗体の使用に対応した発色システムを選択しなくてはなりません。当社では、アルカリホスファターゼ標識二次抗体を使用しています。NBT/BCIP は、この酵素との使用に適しているため、当社のウェスタントランスファーの可視化に使用しています。

5. インキュベーション中には膜の攪拌は不可欠ですか？

はい。インキュベーション中に膜を攪拌することが不可欠です。膜を攪拌しないと、抗体、ブロッキングバッファーおよび洗浄バッファーが膜に均等に作用しない可能性があるため、バックグラウンドにシミや斑点が生じるおそれがあります。また、抗体によるタンパク質の検出も制限される可能性があります。

6. 同一の抗体の異なるロットを使用した場合にウェスタントランスファー法の結果に差が生じるのはなぜでしょうか？

ポリクローナル抗体の性質上、ロット間変動が生じる可能性があるためです。

7. タンパク質の転写ステップでプロットングペーパーは必要でしょうか？

はい。タンパク質の転写ステップで障壁としてプロットングペーパーを挟む必要があります。このプロットングペーパーは、ゲルおよび膜がスポンジと直接接触することによって生じる損傷を防ぐのに有用ですが、電流を妨害することはありません。

8. ウェスタントランスファー法では一次/二次抗体系でなく酵素標識一次抗体を使用することはできますか？

はい。ウェスタントランスファー法を行うとき、一次 / 二次抗体系を使用する代わりに酵素標識一次抗体を使用することができます。しかし、抗原特異的な一次抗体を認識する標識二次抗体を使用すると、ウェスタントランスファー法で検出されるシグナルが酵素標識一次抗体のみを使用した場合と比べて増強されます。

ウェスタントランスファー法 トラブルシューティングガイド

問題	考えられる原因	提案
シグナルが弱い/ シグナルがない	タンパク質の量が不十分である	- 試料中のタンパク質の量を増やしてください。 - タンパク質が存在していることを別の方法で確認してください。
	ゲルの泳動時間が長すぎる	泳動時間を短縮して、ダイフロントを注視し、ダイフロントがゲルの底部の近くに到達したときに電流が切られていることを確認してゲルをモニタリングしてください。
	タンパク質試料が古い/ 劣化している	標的タンパク質の新たな試料を試験してください。
	タンパク質の転写量が多すぎる/ タンパク質が適切に転写されなかった	- 孔径の小さい膜を使用してください。 - 低分子タンパク質（10kDa 未満）では電圧を下げてください。 - 膜が製造元の指示どおりにあらかじめ浸漬されていることを確認してください。 - 標的タンパク質の分子量によって適切な転写時間が異なりますので、転写時間をチェックし最適化してください。 - 転写用の「サンドイッチ」が適切に組み立てられており、ゲルと膜の接触が十分であることを確認してください。 - 適切な転写バッファーが使用されていることを確認してください。 - 転写の際に SDS が添加されると、ニトロセルロース膜の使用時にタンパク質の結合能が低下する可能性があります。 - 結合能を高めるために転写バッファーに 20% メタノールを添加してください。 - ポンソー S などの可逆的染色で膜を染色して主なバンドを可視化することにより、タンパク質の転写状況をチェックしてください。
	タンパク質のpHが9を超えている	さらに pH の高いバッファー（つまり、CAPS バッファー、pH 10.5）と交換してください。
	タンパク質がブロッキングバッファーによってマスクされている	- 別の種類のブロッキングバッファーを使用して試験してください。 - ブロッキングバッファーのタンパク質濃度を最適化してください。当社では diH₂O に溶解した 10% Sea Block を推奨します。
	酵素阻害剤が存在している（例：アジ化化合物）	HRP シグナルを阻害するため、バッファーがアジ化ナトリウムを含有していないことを確認してください。
	一次抗体が古い / 劣化している	- 貯法や使用期限に関する製造元の推奨事項をチェックしてください。使用期限が切れていたり保存期間が過ぎていたりする場合には、新たな抗体を購入してください。 - 抗体に対して凍結融解サイクルを繰り返した場合には、構造およびタンパク質と抗体の結合に影響する可能性があるため、新たな抗体を購入してください。 - 抗体の活性が失われていないことを確認するために、ドットプロット法を実施してください。
	一次抗体や二次抗体の量が不十分である	- 抗体濃度に関する製造元の推奨事項をチェックしてください。 - 個々の分析の至適条件を設定するために、幅広い濃度を検討してください。
	一次抗体が不適切である	一次抗体が検討対象の動物種に由来する標的タンパク質と反応することを確認してください（つまり、ウサギ抗ヒト VEGF → ヒト VEGF）。
	二次抗体が不適切である	使用する二次抗体が一次抗体の動物種に対する抗体であることを確認してください（つまり、ロバ抗ウサギ IgG → ウサギ抗ヒト VEGF）。
	一次抗体のインキュベーションが不十分である	一次抗体のインキュベーション時間を延長してください。抗体は、室温で少なくとも 1 時間または 4℃で一晩、インキュベートすることができます。

問題	考えられる原因	提案
シグナルが弱い／シグナルがない (続き)	二次抗体のインキュベーションが不十分である	二次抗体のインキュベーション時間を延長してください（インキュベーションの時間と温度に関する製造元の推奨事項をご覧ください）。
	膜の過度の洗浄	- 洗浄時間を短くして同時に洗浄回数を減らすか、またはそのいずれかを行ってください。 - 界面活性剤不含の洗浄バッファーまたは界面活性剤濃度の低い洗浄バッファーを使用してください。
	発色試薬の相性が悪い	- 使用している発色試薬酵素標識抗体に対応していることを確認してください。 - 基質が製造元の指示に従って適切に作製されていることを確認してください。
	塩類が過剰に存在する	- 洗浄バッファー中の塩類の量を減らしてください。 - 抗体希釈バッファー中の塩類の量を減らしてください。
	発色試薬が劣化している／不適切である	- 発色試薬が適切に調製されたことを確認してください。 - 試薬の活性が失われていないことをチェックしてください。活性が失われている場合には新たな試薬を購入してください。
	フィルムが不良である／使用期限が切れている（ECL 法の場合）	フィルムが使用期限が切れていない／露出していないことを確認してください。使用期限が切れていたり露出していたりする場合には、新たなフィルムを購入してください。
	ECL 現像液が古い／使用期限が切れている（ECL 法の場合）	新たな ECL 現像液を使用してください。
	フィルムへの露光時間が短すぎる（ECL 法の場合）	フィルムへの露光時間を延長してください。
	クリングフィルムが反応に干渉する（ECL 法の場合）	別の等級のクリングフィルムを使用してください。
バックグラウンドが高い	抗体濃度が高すぎる	- 一次および／または二次抗体濃度に関する製造元の推奨事項をチェックしてください。 - 個々の分析の至適条件を設定するために、幅広い濃度を検討してください。
	抗体のインキュベーションが過剰である	製造元のプロトコルをチェックし、インキュベーションの時間と温度が適切であることを確認してください。この情報が製造元から提供されていない場合には、試験によってインキュベーション時間を最適化してください。
	抗体の非特異的な結合がみられる	- 一次抗体が標的タンパク質のみに特異的であることを確認してください。 - 一次抗体のインキュベーションを省き、コントロール実験を行ってください。バンドが発現した場合には、別の二次抗体を選択してください。 - 二次抗体に別の宿主動物種を選択してください。
	抗体がブロッキングバッファーおよび／または試料中のタンパク質と交差反応している	- 組成の異なるブロッキングバッファーを使用してください。 - ヤギ抗体はウシタンパク質をわずかに認識するため、BSA と反応します。これによって膜上には紫色の光沢が生じます。この場合には、別の動物種の抗体または別の種類のブロッキングバッファーを使用してください。 - 二次抗体を懸濁する場合には、標的タンパク質と同じ動物種由来の 1 ～ 5% 正常血清を含有するバッファーで抗体を希釈してください。
	ブロッキングバッファーが無効である	- 組成の異なるブロッキングバッファーを使用してください。 - Tween 20 などの界面活性剤をブロッキングバッファーに添加してください。

ウェスタントランスファー法 トラブルシューティングガイド (続き)

問題	考えられる原因	提案
バックグラウンドが高い (続き)	ブロッキングが不十分である	- 組成の異なるブロッキングバッファーを使用してください。 - ブロッキングバッファーのロットが活性を失っている可能性があります。新たなブロッキングバッファーを使用してください。 4℃で一晩、ブロッキングを行う場合、低温になると効果が下がることから、ブロッキング効果が低下する可能性があります。室温で1時間のインキュベーションを試してください。 - ブロッキングステップのインキュベーション時間および/または温度を最適化してください。
	洗浄が不十分である	- 各ステップの後には1回10分で3回、膜を洗浄してください。それでも十分でない場合には、洗浄時間を延長してください。 - 洗浄バッファーに別の種類の界面活性剤を使用してみるか、添加されていない場合には Tween 20 を添加してください。 - 使用する洗浄バッファーの量を増やしてください。
	発色基質のインキュベーションが過剰である	発色溶液のインキュベーション時間を短縮してください。バンドが認められるまで発色状況をモニタリングし、diH_2O で膜を洗浄することによって反応を停止させてください。
	酵素が過剰に存在している	選択した酵素標識抗体の濃度を下げてください。
	内在性酵素による干渉	脱脂粉乳は、内在性ビオチンを含有しているため、アビジン / ビオチン検出系に干渉する可能性があります。3% BSA などの別の種類のブロッキングバッファーを使用してください。
	試薬の汚染が生じている	- 使用前にバッファーをろ過し、汚染物質を除去してください。 - 新たなバッファーを調製し、ウェスタントランスファー法を再度実行してください。
	膜に問題がある	- 新たな膜を試してください。 - 手順全体を通して膜を乾燥させてもよいのは、転写と免疫染色の間のみです。免疫染色を始めた後、免疫染色の手順が終了するまで膜を乾燥させてはいけません。その他免疫染色の手順の間のどの時点であっても膜を乾燥させた場合にはウェスタントランスファー法を再度実行してください。
	ECL フィルムへの露光が過度になっている (ECL 法の場合)	- フィルムへの露光時間を短縮してください。 - 標的タンパク質からのシグナルが強すぎる場合には、5～10分待ってからフィルムに再露光を行ってください。
バックグラウンドにシミがある	インキュベーション中の攪拌が均一でなかった	インキュベーション中に膜が振盪器または攪拌器で均一に攪拌されていることを確認してください。
	インキュベーションバッファーの量が不十分である	各インキュベーション中には膜を完全に浸漬し溶液中に膜を自由に浮遊させることができるだけの十分な量の溶液があることを確認してください。
	転写の際に気泡が生じている	転写を開始する前に転写用「サンドイッチ」から丁寧に気泡をすべて除去してください。これは、ローラーまたは清浄なガラス棒 / パスツールピペットを用いて行うことができます。

問題	考えられる原因	提案
バックグラウンドにシミがある (続き)	膜に問題がある	- 製造元のプロトコルに従って膜を十分に湿潤させていることを確認してください。 - 膜の取り扱いには慎重に行ってください。取り扱いを誤ると非特異的結合の原因となる可能性があります。 - 膜を素手で取り扱うと膜の汚染につながる可能性があるため、膜を取り扱う際にはピンセットを使用するか、手袋を着用してください。
	HRP 標識抗体の凝集が起こっている	- HRP を使用する場合には、標識抗体をろ過して HRP の凝集物を除去してください。 - HRP 標識抗体の新たな試料を使用してください。
	試薬の汚染が生じている	- 使用前にバッファーをろ過し、汚染物質を除去してください。 - 新たなバッファーを調製し、ウェスタントランスファー法を再度実行してください。
非特異的なバンドが出る	抗体濃度が高すぎる	- 一次および / または二次抗体濃度に関する製造元の推奨事項をチェックしてください。 - 個々の分析の至適条件を設定するために、幅広い濃度を検討してください。
	抗体が古い / 劣化している	- 貯法や使用期限に関する製造元の推奨事項をチェックしてください。使用期限が切れていたり保存期間が過ぎていたりする場合には、新たな抗体を購入してください。 - 抗体に対して凍結融解サイクルを繰り返した場合には、構造およびタンパク質と抗体の結合に影響する可能性があるため、新たな抗体を購入してください。
	一次抗体の非特異的な結合がみられる	- 一次抗体の濃度を下げてください。 - ゲルに添加するタンパク質の濃度をチェックしてください。 - モノクローナル抗体や抗原親和性精製ポリクローナル抗体など特異性の高い抗体を使用してください。 - Tween 20 (0.1 ~ 0.5%) などの界面活性剤を一次抗体溶液および / またはプロットングバッファーに少量添加してください。 - 洗浄の回数を増やすか、洗浄時間を延長してください。
	二次抗体の非特異的な結合がみられる	- 二次抗体の濃度を下げてください。 - 一次抗体のインキュベーションを省き、コントロール実験を行ってください。 - バンドが発現した場合には、別の種類の二次抗体を選択してください。 - Tween 20 (0.1 ~ 0.5%) などの界面活性剤を二次抗体溶液に少量添加してください。 - 洗浄の回数を増やすか、洗浄時間を延長してください。
	標的タンパク質の凝集が生じている	- DTT、BME などの還元剤を添加するか増量し、すべてのジスルフィド結合が還元されるようにしてください。 - ゲルにロードする前に、温浴槽で 5 ~ 10 分間、タンパク質試料を加熱してください。 - ゲルに添加するタンパク質の濃度をチェックしてください。濃度が高すぎるとタンパク質の凝集の原因となる可能性があります。タンパク質の濃度を下げウェスタントランスファー法を再度実行してください。
	タンパク質試料が劣化している	- 新たな試料を調製し、試料の凍結融解サイクルを最小限にしてください。 - プロテアーゼ阻害剤を試料に添加してから保存してください。 - 試料は -20°C から -80°C までの範囲で保存してください。

ウェスタントランスファー法 トラブルシューティングガイド (続き)

問題	考えられる原因	提案
非特異的なバンドが出る (続き)	ブロッキングが不十分である	- 組成の異なるブロッキングバッファーを検討してください。 - ブロッキングバッファーのロットが活性を失っている可能性があります。新たなブロッキングバッファーを使用してください。 4℃で一晩、ブロッキングを行う場合、低温になると効果が下がることから、ブロッキング効果が低下する可能性があります。室温で1時間のインキュベーションを試してください。 - ブロッキングバッファーに Tween 20 を添加してください。 - ブロッキングステップのインキュベーション時間および / または温度を最適化してください。
	SDS によって固定したタンパク質のバンドとの結合が促進されている	- タンパク質の転写後に膜が十分に洗浄されていることを確認してください。 - ニトロセルロース膜を使用する免疫染色では SDS を使用してはいけません。
	酵素が過剰に存在している	選択した酵素標識抗体の濃度を下げてください。
	試薬の汚染が生じている	- 使用前にバッファーをろ過し、汚染物質を除去してください。 - 新たなバッファーを調製し、ウェスタントランスファー法を再度実行してください。
拡散したバンド / 曖昧なバンド	抗体濃度が高すぎる	- 一次および / または二次抗体濃度に関する製造元の推奨事項をチェックしてください。 - 個々の分析の至適条件を設定するために、幅広い濃度を検討してください。
	ゲル上のタンパク質が過剰である	ゲルにロードする前にタンパク質試料をさらに希釈してください。
	ゲルが過熱されている / 電圧が高い	- 熱によってゲルはその構造と分離能を失います。転写リザーバが氷浴槽中で作動していることを確認してください。 - 転写の際に使用する電圧または電流を下げてください。
	膜の作製に誤りがある	膜を適切な転写溶液にあらかじめ浸漬してください (製造元のプロトコルをご覧ください)。膜の浸漬時間が適切であることを確認してください。
白抜きのバンド (ECL 可視化法)	抗体またはタンパク質濃度が高すぎる / 過剰なシグナルが発生している	バンドが白抜きになるのは、標識抗体の量が多すぎるために基質が急速に消費された結果です。この原因は抗体および / またはタンパク質の濃度が高すぎることにあります。抗体および / またはタンパク質濃度に関する製造元の推奨事項をチェックしてください。

索引

α Klotho	84
β -NGF	101
14 kDa lectin	44
1-alkyl-2-acetylgllycerophosphocholine esterase	105
26 kDa protein	65
2-acetyl-1-alkylglycerophosphocholine esterase	105
4-1BB Ligand	17
4-1BB Receptor	17
6Ckine	38
A Proliferation-Inducing Ligand	16
A8	28
ABCD-1	91
ABCD-2	120
Abrineurin	21
ACH	40
Acrp-30	13
ACT-2	85, 94
Activation-Induced TNFR member Ligand	13
Activation-inducible lymphocyte immunomediatory molecule (AILIM)	54
Activin A	13
Activin-binding protein	42
ADI	16
Adipolean (human)	44
Adiponectin	13
AdipoQ	13
Adipose tissue-specific secretory factor	115
ADSF	115
AGIF (Adipogenesis Inhibitory Factor)	70
AIGF	40
AIMP1	35
AITRL	13
Aldesleukin	60
ALP	30
Alpha Defensin-1	102
Alpha-2-HS-glycoprotein	39
Alpha-2-Z-globulin	39
AMAC-1	97
Aminopeptidase	14
Amphiregulin	14
Amyloid fibril protein AA	16
ANG-1	14
ANG-2	14
ANG-5	14
Angiopoietin-1	14
Angiopoietin-2	14
Angiopoietin-like protein 3	14
Angiopoietin-like protein 7	15
Angiopoietin-related protein 7	15
ANGPT1	14
ANGPT2	14
ANGPT5	14
ANGPTL-3	14
ANGPTL-7	15
Antimicrobial peptide-57	49
AOC3	130
AP-57	49
APM-1	13, 44
APM-1 variant	44
Apo I	39
Apo I Ligand	39
Apo2	128
Apo2 ligand	127
Apo3 Ligand	129
ApoA-I	15

ApoE2	15
ApoE3	15
ApoE4	15
Apolipoprotein A-I	15
Apolipoprotein E2	15
Apolipoprotein E3	15
Apolipoprotein E4	15
Apo-SAA	16
Apo-SAA1	16
APRIL	16
APT1LG1	39
APTL	39
AR	14
AREG	14
Arg-C	16
Arginine Deiminase	16
Arginine-Rich Protein (ARP)	88
ARIA (Acetylcholine Receptor Inducing Activity)	52
ARMD10	124
ARMET	88
ARMETL1	28
ART	17
Artemin	17
ARTN	17
ATAC	88
ATAR	53
ATF-1	47
B- and T-lymphocyte attenuator	24
B- and T-lymphocyte-associated protein	24
B7	18
B7 homolog 2	18
B70	18
B7-1 Fc	18
B7-2 Fc	18
B7-H1 (B7 homolog 1)	108
B7-H2 Fc	18
B7-like protein G150	18
B7-related protein 1 (B7RP-1)	18
Ba-alpha-2-glycoprotein	39
BAFF	18
BAFF Receptor	19
BAFFR	19
BB1	18
BB18	28
BCA-1 (CXCL13)	19
BCA-1/BLC (CXCL13)	19
BCDF	63
BCDFII	64
B-cell Activating Factor belonging to the TNF family	18
B-cell Attracting Chemokine-1	19
B-Cell Differentiation Factor (BCDF)	65
B-Cell Maturation Antigen	19
B-cell Stimulating Factor (BSF-1)	63
B cell Stimulatory Factor-2	65
BCGF	63
BCM	19
BCMA	19
BD-1 (36 a.a.)	20
BD-1 (47 a.a.)	20
BD-2	20
BD-3	20
BD-4	20
BD5	20
BD-5	20

索引 (続き)

BDCA-3	122	C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4	25
BDNF	21	C5a	25
BEK	40	Cachectin	124
Betacellulin	21	CAK1 antigen	92, 98
Beta-Defensin 1	20	Carboxypeptidase-B	25
Beta-Defensin 2	20	Cardiotrophin-1	25
Beta-Defensin 3	20	Cardiotrophin-like cytokine	101
Beta-Defensin 5	20	Cardiotrophin-like cytokine factor 1 (CLCF1)	101
Beta-Defensin 104	20	Cartilage-Derived Morphogenetic Protein-1 (CDMP-1)	46
Beta-galactoside-binding lectin L-14-I	44	Cartilage-Derived Morphogenetic Protein-2 (CDMP-2)	24
beta-Nerve Growth Factor	101	Cartilage-Derived Retinoic Acid-sensitive Protein (CD-RAP)	92
BFGFR	40	Cartilage-inducing factor	121
BLAST-2	27	Catabolin	59
BL-CAM	26	CC10	130
BLR1 Ligand	19	CCF18	94
B-Lymphocyte cell adhesion molecule	26	CKK-1	92
BLyS	18	CCL2	89
BLyS Receptor 3	19	CCL7	89
BM-40	119	CCL8	89
BMP-2	21	CCL12	89
BMP-2A	21	CCL13	89
BMP-2B	22	CCN1	32
BMP-3	22	CCN2	30
BMP-3A	22	CCN3	102
BMP-4	22	CCN4	134
BMP-5	23	CCN5	31
BMP-6	23	CCN6	134
BMP-7	23	CCPBP	130
BMP-9	46	sCD4	26
BMP-10	23	sCD8a	26
BMP-11	47	CD8A	26
BMP-12	47	sCD14	26
BMP-13/CDMP-2	24	sCD22	26
bolekin	24	sCD23	27
Bone Morphogenetic Protein-2	21	CD23 antigen	27
Bone Morphogenetic Protein-3	22	CD25 antigen	61
Bone Morphogenetic Protein-4	22	sCD27 Ligand	27
Bone Morphogenetic Protein-5	23	sCD27L	27
Bone Morphogenetic Protein-6	23	sCD28 Fc	27
Bone Morphogenetic Protein-7	23	CD28 homolog	124
Bone Morphogenetic Protein-10	23	sCD30 Ligand	27
Bone Morphogenetic Protein-13	24	CD30L	27
Bone Morphogenetic Protein-14	46	CD31 antigen	108
Bone sialoprotein 1	104	sCD34	27
B-R1	83	sCD40 Ligand	28
Brain-Derived Neurotrophic Factor	21	CD54 antigen	53
BRAK (CXCL14)	24	CD62E	38
Breast and Kidney-expressed chemokine	24	CD70	27
Breast cancer cell differentiation factor p45	52	CD80	18
Breast Cancer Estrogen-Inducible protein (BCEI)	120	CD86	18
BSC-1	121	CD95	39
BSF-2	65	CD95L	39
BTC	21	sCD100	28
B-TCGF	69	CD106	131
BTLA Fc	24	CD120a	126
Butyrophilin B7-DC	108	CD120b	126
C-reactive protein	30	CD124	64
C1 Esterase Protein	24	CD126	66
C1 Inhibitor	24	CD137	17
C10 (CCL6)	25	CD137L	17
C16orf77	80	CD141	122
C1inh	24	CD142	123
C1-inhibiting factor	24	CD152	31

CD153	27	CRP	30
CD154	28	CRP-1	54
CD178	39	Cryptdin	102
CD252	105	CSBF	49
CD253	127	CSC-21K	123
CD254	111	CSDD1	87
CD256	16	CSF-1	90
CD257	18	CSF-2	48
CD258	87	CSF-3	45
CD261	128	CSIF	69
CD262	128	CT-1	25
CD265	112	CT-58	31
CD267	119	CTACK (CCL27)	30
CD268	19	CTAP-III (precursor)	99
CD269	19	CTGF	30
CD270	53	CTGFL/WISP-2	31
CD272	24	CTL Maturation Factor (TCMF)	70
CD273	108	CTLA-4 Fc	31
CD274	108	CTLA-8	73
CD275	18	Cutaneous T-cell Attracting Chemokine	30
CD278	54	CVID1	54
CD279	106	CXCL1	50
CD283 antigen	124	CXCL2	50
CD284	124	CXCL3	50
CD333	40	CXCL16	31
CD354	128	Cyclin-Dependent Kinase 4 Inhibitor A	105
CDD	117	Cyclin-Dependent Kinase Inhibitor 2A	105
CDK4I	105	CYR61	32
CDNF	28	Cysteine-rich 61	32
CDT6	15	Cysteine-rich secreted protein FIZZ1	114
CDw137	17	Cysteine-rich secreted protein FIZZ2	114
CEK2	40	Cytokine ZCYTO7	74
Cerebral Dopamine Neurotrophic Factor	28	Cytokine ZCYTO10	77
Cetermin	121	Cytokine ZCYTO18	78
Chemerin	29	Cytotoxic Cell Protease 1 (CCP1)	49
Chemokine-like protein TAFA-2	119	Cytotoxic Lymphocyte Maturation Factor (CLMF)	70
Ciliary Neurotrophic Factor	29	Cytotoxic Lymphocyte Maturation Factor 35 kDa subunit (CLMF p35)	70
CINC	50	Cytotoxic Lymphocyte Maturation Factor 40 kDa subunit (CLMF p40)	70
CkB-6	36	Cytotoxic T-lymphocyte-associated antigen 4	31
c-Kit Ligand	116	Cytotoxin	124
CKTSF1B1	49	D factor	87
Ck-β8	96	DAND2	49
Clara Cell Phospholipid-Binding Protein	130	DAND6	117
Clara Cells 10 kDa secretory protein	130	DC-CK1	97
Cluster determinant 4	26	DDC-4 (rat homologue)	43
c-MPL Ligand	126	DEFB1	20
CNTF	29	DEFB2	20
Coagulation factor III	123	DEFB3	20
COL18A1	35	DEFB4	20
colon cancer cell growth inhibitor	57	DEFB4A	20
Colon-derived SUSD2 binding factor	49	DEFB5	20
Colorectum cell-Derived Growth Factor (CRDGF)	14	DEFB103A	20
Complement 5a	25	DEFB105a	20
Complement Component 5a	25	Delta-1	32
Connective Tissue Growth Factor	30	Delta-like protein-1	32
Connective Tissue Growth Factor-Like protein	31	Delta-like protein-4	32
Copper Amine Oxidase	130	Dickkopf-1	32
Cornea-derived transcript 6 protein	15	Dickkopf-2	32
CPAMD4	25	Dickkopf-3	32
Cpb1	25	Dickkopf-related protein 1	32
CPB-35	44	Dickkopf-related protein 2	32
CPG15	99	Dickkopf-related protein 3	32
crp-2	82	Differentiation inhibiting factor	121

索引 (続き)

Differentiation-inducing factor (DIF)	124	Exodus-2 (CCL21)	38
Differentiation-stimulating factor	87	Exodus-3	96
Diphtheria Toxin Receptor (DTR)	51	EZF	84
DKK-1	32	F3	123
DKK-2	32	factor III	123
DKK-3	32	Fallotin	107
sDLL-1	32	FAM19A2	119
sDLL-4	32	Fas Antigen	39
DR3LG	129	sFas Ligand	39
DR4	128	sFas Receptor	39
DR5	128	sFasL	39
DRM	49	sFasR	39
Drosophila Delta homolog 4	32	Fc-epsilon-RII	27
DVR4	22	Fetuin A/AHSG	39
EBI3	79	FGF-acidic	40
EBV-induced gene 3 protein	79	FGF-basic	40
ECGF-beta	40	FGF-basic (146 a.a.)	40
EDF	64	FGF-basic (154 a.a.)	40
EGF	33	FGF-1	40
EGF Receptor (EGFR)	34	FGF-2	40
EGF-L7	34	FGF-4	40
EG-VEGF	34	FGF-5	40
ELC	96	FGF-6	40
EMAP-II	35	FGF-8a	40
EMAP-2	35	FGF-8b	40
ENA-78 (CXCL5) (5-78 a.a.)	35	FGF-9	40
ENA-78 (CXCL5) (8-78 a.a.)	35	FGF-10	40
EndoCAM	108	FGF-16	40
Endocrine Gland-derived Vascular Endothelial Growth Factor	34	FGF-17	40
Endogenous Pyrogen (EP)	58, 59	FGF-18	40
Endoproteinase Lys/Arg-Arg	83	FGF-19	40
Endostatin	35	FGF-20	40
Endothelial Leukocyte Adhesion Molecule 1 (ELAM1)	38	FGF-21	40
Endothelial monocyte-activating polypeptide II	35	FGF-23	40
Enovin	17	FGFA	40
Enterokinase	35	FGF-binding protein 1	40
Eotaxin (CCL11)	36	FGF-BP	40
Eotaxin-2 (CCL24)	36	FGF-BP-1	40
Eotaxin-3 (CCL26)	37	FGFG	40
EPC-1	108	FGFH	40
EPG	37	FGFI	40
Epidermal Growth Factor	33	FGF-inducible 14	129
Epidermal Growth Factor-Like protein 7	34	FGFJ	40
Epidermal Growth Factor Receptor	34	FGFK	40
Epigen	37	FGFL	40
Epiregulin	38	FGFN	40
Epithelial mitogen	37	FGFR1a (IIIc) Fc	40
Epithelial Neutrophil Activating Peptide-78	35	FGFR2a (IIIc) Fc	40
EPO	38	FGFR3 (IIIc) Fc	40
Epoetin	38	Fibroblast Collagenase	97
Epstein-Barr virus-induced gene 3 protein	79	Fibroblast collagenase inhibitor	122
ErbB1	34	Fibroblast Growth Factor-acidic	40
ERC	92	Fibroblast Growth Factor-basic	40
EREG	38	Fibroblast Growth Factor-4	40
Erythroid Differentiation Factor (EDF)	13	Fibroblast Growth Factor-5	40
Erythroid-potentiating activity	122	Fibroblast Growth Factor-6	40
Erythropoietin	38	Fibroblast Growth Factor-7	40
E-Selectin	38	Fibroblast Growth Factor-7 (FGF-7)	84
Eskine	30	Fibroblast Growth Factor-8	40
ESPO-1	91	Fibroblast Growth Factor-9	40
ETC1	18	Fibroblast Growth Factor-10	40
ETGF	121	Fibroblast Growth Factor-16	40
Exodus-1	96	Fibroblast Growth Factor-17	40

Fibroblast Growth Factor-18.....	40	Gelatin-binding protein.....	13
Fibroblast Growth Factor-19.....	40	GH.....	51
Fibroblast Growth Factor-20.....	40	GH-N.....	51
Fibroblast Growth Factor-21.....	40	GIF.....	93
Fibroblast Growth Factor-23.....	40	GIGI protein.....	32
Fibroblast growth factor binding protein 1.....	40	GITRL.....	13
Fibroblast Growth Factor Receptor 1 alpha.....	40	GKLF.....	84
Fibroblast Growth Factor Receptor 2 alpha.....	40	Glia Maturation Factor beta.....	49
Fibroblast Growth Factor Receptor 3 alpha.....	40	glial growth factor.....	52
Fibroblast Interferon.....	54	Glial-Derived Neurotrophic Factor.....	47
Fibronectin type III domain-containing protein 5 (FNDC5).....	83	GLIF.....	93
Fibronectin type III repeat-containing protein 2 (FRCP2).....	83	Glioblastoma-derived T-cell suppressor factor.....	121
FIGF.....	133	Glioma-derived endothelial cell mitogen.....	131
FIL1 delta.....	81	Glioma-Derived Growth Factor (GDGF).....	107
FIL1ε (FIL1E).....	80	globular domain of Acrp30.....	43
FIZZ3.....	115	GLP-1.....	48
FKN.....	43	Glucagon-Like Peptide 1.....	48
Flt3L.....	42	Glycoprotein Gp34.....	105
Flt3-Ligand.....	42	Glycosylation-Inhibiting factor.....	93
Flt4-Ligand.....	132	GM-CSF.....	48
Fms-related tyrosine kinase 3 Ligand.....	42	GM-CSF beta.....	45
FN14.....	129	GMFB.....	49
Folliculostellate cell-derived growth factor.....	131	GMF-β.....	49
Follistatin.....	42	Gp39.....	28
Follistatin-like protein 1.....	43	GPR15L.....	49
Follistatin-related protein 1.....	43	GR3.....	28
Fractalkine (CX3CL1).....	43	Granulocyte Chemotactic Protein-2.....	45
FRP.....	13, 43	Granulocyte Colony-Stimulating Factor.....	45
sFRP-1.....	43	Granulocyte-Macrophage Colony-Stimulating Factor.....	48
sFRP-4.....	43	Granzyme B.....	49
FS.....	42	Gremlin-1.....	49
FSH (Follicle-Stimulating Hormone)-releasing protein.....	13	GRO/KC (CXCL1).....	50
FSL1.....	43	GRO1.....	50
FSTL1.....	43	GRO2.....	50
FUR.....	43	GRO3.....	50
Furin.....	43	Growth Hormone.....	51
gAcrp30.....	44	Growth Hormone 1.....	51
gAcrp30/Adipolean.....	44	Growth/Differentiation Factor-2.....	46
gAcrp30/Adipolean Variant.....	44	Growth/Differentiation Factor-3.....	46
gad.....	43	Growth/Differentiation Factor-5.....	46
GAF (Glia-Activating Factor).....	40	Growth/Differentiation Factor-7.....	47
Galactose-specific lectin-1.....	43	Growth/Differentiation Factor-11.....	47
Galactose-specific lectin-3.....	43	Growth/Differentiation Factor-15.....	47
Galaptin.....	44	Growth-hormone-dependent binding protein.....	57
Galectin-1.....	43	GRO-α/MGSA (CXCL1).....	50
Galectin-3.....	43	GRO-β (CXCL2).....	50
Gamma-Interferon Inducible Protein 10.....	82	GRO-β/MIP-2 (CXCL2).....	50
GASP.....	45	GRO-γ (CXCL3).....	50
GASP-1.....	45	H2 relaxin.....	113
GBP-28.....	13	H3 relaxin.....	113
GCP-2 (CXCL6).....	45	HBD1.....	20
G-CSF.....	45	HBEGF.....	51
GDF-2.....	46	HB-EGF.....	51
GDF-3.....	46	HBGF-1.....	40
GDF-5 (BMP-14/CDMP-1).....	46	HBGF-2.....	40
GDF-6.....	24	HBGF-4.....	40
GDF-7.....	47	HBGF-5.....	40
GDF-8.....	98	HBGF-6.....	40
GDF-11.....	47	HBGF-7.....	84
GDF-15/MIC-1.....	47	HBGF-8.....	40
GDF-Associated Serum Protein-1.....	45	HBGF-9.....	40
GDNF.....	47	HBp17.....	40
Gelatinase A.....	97	HC14.....	89

索引 (続き)

HC21	85	IgE-binding protein	44
HCC-1 (CCL14) (66 a.a.)	51	IGF-I	56
HCC-1 (CCL14) (72 a.a.)	51	IGF-I LR3	56
HCC-1/HCC-3	51	IGF-1A	56
HCC-2	97	IGF-II	56
HCC-4	85	IGF binding protein-related protein-1 (IGFBP-rP1)	57
HCGF	62	IGF-BP1	57
Hematopoietic progenitor cell antigen CD34	27	IGF-BP2	57
Hematopoietic system regulatory peptide	122	IGF-BP3	57
Hematopoietin-1	58	IGF-BP4	57
Hemofiltrate CC Chemokine-1	51	IGF-BP5	57
Heparin Affin Regulatory Protein (HARP)	109	IGF-BP6	57
Heparin Binding EGF-like growth factor	51	IGF-BP7	57
Heparin-Binding Growth Factor-8 (HBGF-8)	109	IGFBP9	102
Hepatocyte Growth Factor	52	IHG-2	49
Hepatopoietin (HPTA)	52	IL-1 α	58
Heregulin β -1	52	IL-1 β	59
HGF	52	IL-1 ϵ (epsilon)	81
HGNF	103	IL-1 ζ (zeta)	81
Hhg-1	118	IL-1 delta	81
Histidine-Proline-Rich Glycoprotein	52	IL-1 eta	81
Histidine-rich glycoprotein (HRG)	52	IL-1F5	81
HLD3	35	IL-1F7	81
HNP-1	102	IL-1F8	81
HP1.A	120	IL-1F9	81
HPAO	130	IL-1 F11	79
HPGF	65	IL-1H1	81
HPRG	52	IL-1H2	81
HRG	52	IL-1H4	81
HRG1- β 1	52	IL-1HY1	81
HRGP	52	IL-1L1	81
HSF	65	IL-1RA	60
hSLE1	106	IL-1ra Homolog 1	81
HST-1	40	IL-1RN	60
HST-2	40	IL-1RP3	81
HT29-IGF-BP	57	IL-2	60
HuB219	86	sIL-2 Receptor α	61
HveA	53	IL-3	62
HVEM	53	IL-3 β	62
HVEM-Fc	53	IL-4	63
HVEM-L	87	sIL-4 Receptor α	64
Hypertrophic chondrocyte-specific protein 24 (HCS24)	30	IL-5	64
I-309 (CCL1)	53	IL-6	65
IBP-1	57	sIL-6 Receptor α	66
IBP-2	57	IL-7	66
IBP-3	57	IL-8 (CXCL8) (72 a.a.)	67
IBP-4	57	IL-8 (CXCL8) (77 a.a.)	67
IBP-5	57	IL-9	68
IBP-6	57	IL-10	69
IBP-7	57	IL-10-inducible chemokine	85
ICAM-1	53	IL-11	70
ICIL-1RA	60	IL-12 p40	70
ICOS Fc	54	IL-12 p70	70
IFN alpha II-1	56	IL-12 p80	70
IFNB1	54	IL-12 subunit p35	70
IFNW1	56	IL-12 subunit p40	70
IFN- β	54	IL-12A	70
IFN- β 2	65	IL-12B	70
IFN- γ	54	IL-13	71
IFN- λ 1	55	IL-13 (109 a.a.)	71
IFN- λ 2	55	IL-13 (113 a.a.)	71
IFN- ω	56	IL-13 Variant	71

IL-15	72	Interleukin-1 α	58
IL-16 (121 a.a.)	73	Interleukin-1 β	59
IL-16 (129 a.a.)	73	Interleukin-1 ϵ (IL1E)	80
IL-17	73	Interleukin-1 Receptor Antagonist	60
IL-17A	73	Interleukin-2	60
IL-17B	74	Interleukin-3	62
IL-17D	74	Interleukin-3 β	62
IL-17E	75	Interleukin-4	63
IL-17F	76	Interleukin-5	64
IL-18BP	76	Interleukin-6	65
IL-19	76	Interleukin 6 family cytokine	87
IL-20	74, 77	Interleukin-7	66
IL-21	77	Interleukin-8	67
IL-22	78	Interleukin-9	68
IL-23	78	Interleukin-10	69
IL-24	78	Interleukin-11	70
IL-25	75, 118	Interleukin-12	70
IL-27	79	Interleukin-12 subunit alpha	70
IL-27-A	79	Interleukin-12 subunit beta	70
IL-27B	79	Interleukin-13	71
IL-28A	55	Interleukin-13 Variant	71
IL-29	55	Interleukin-15	72
IL-30	79	Interleukin-16	73
IL-31	79	Interleukin-16 receptor	26
IL-33	79	Interleukin 17	73
IL-34	80	Interleukin-17A	73
IL-35	80	Interleukin-17B	74
IL36A	80	Interleukin-17D	74
IL-36RA	81	Interleukin-17E	75
IL-36 α (IL-1F6)	80	Interleukin-17F	76
IL-36 β (IL-1F8)	81	Interleukin-18 Binding Protein	76
IL-36 γ (IL-1F9)	81	Interleukin-19	76
IL-37 (IL-1F7)	81	Interleukin-20	77
IL-T	72	Interleukin-21	77
IL-TIF	78	Interleukin-22	78
Immune Interferon	54	Interleukin-23	78
Immunoglobulin and proline-rich receptor 1 (IGPR-1)	124	Interleukin-24	78
INCAM-100	131	Interleukin-27	79
Inducible Costimulator-Ligand (ICOSL)	18	Interleukin-27 subunit alpha	79
Inducible T-cell costimulator	54	Interleukin-27 subunit beta	79
Inhibin beta-1	13	Interleukin-30	79
INSL5/INSL7 Hybrid	82	Interleukin-31	79
INSL7	113	Interleukin-33	79
Insulin-like Growth Factor-Binding Protein 1	57	Interleukin-34	80
Insulin-like Growth Factor-Binding Protein 2	57	Interleukin-35	80
Insulin-like Growth Factor-Binding Protein 3	57	Interleukin-36RA	81
Insulin-like Growth Factor-Binding Protein 4	57	Interleukin-36 Receptor Antagonist	81
Insulin-like Growth Factor-Binding Protein 5	57	Interleukin-36 α	80
Insulin-like Growth Factor-Binding Protein 6	57	Interleukin-36 β	81
Insulin-like Growth Factor-Binding Protein 7	57	Interleukin-36 γ	81
Insulin-like Growth Factor-I	56	Interleukin-37	81
Insulin-like Growth Factor-II	56	Interstitial Collagenase	97
Insulin-like peptide-7	113	Intestinal Trefoil Factor (ITF)	120
INT-1	134	IP-10 (CXCL10)	82
Intercellular Adhesion Molecule 1	53	IRAP	60
Interferon-beta	54	Irisin	83
Interferon-gamma	54	Ironplact	109
Interferon Inducible T-Cell α Chemokine	83	I-TAC (CXCL11)	83
Interferon-lambda 1	55	JE (murine)	89
Interferon-lambda 2	55	JE/MCP-1 (CCL2)	89
Interferon-omega	56	JTK4	40
Interleukin IL-16 receptor	26	KC (CXCL1)	50
Interleukin-1 family member 6 (IL-1F6)	80	Keratinocyte Growth Factor	84

索引 (続き)

Keratinocyte Growth Factor-2	40	Macrophage Inflammatory Protein-5	97
Kex-2	83	Macrophage Inhibitory Cytokine 1	47
KGF (FGF-7)	84	Macrophage Migration Inhibitory Factor	93
KGFR	40	Macrophage-Derived Chemokine	91
KIAA0003	14	MAF	54
KIAA0443	45	Major group rhinovirus receptor	53
KILLER	128	Mammothropin	110
KLA	84	MANF	88
KLF4	84	MARC	89
KLF4-TAT	84	Maspin	88
Klotho	84	Mast Cell Growth Factor (MGF)	62, 116
Kruppel-like Factor-4	84	Matrix Metalloproteinase-1	97
L-29	44	Matrix Metalloproteinase-2	97
L3T4 (mouse)	26	Matrix Metalloproteinase-3	98
LAG-1 (CCL4L1)	85	MCAF	89
LARC	96	MCGF (Mast Cell Growth Factor)	62
LCC-1	85	MCP-1 (CCL2)	89
LCF (Lymphocyte Chemoattractant Factor)	73	MCP-2 (CCL8)	89
LD78 α	94	MCP-3 (CCL7)	89
LD78 β (CCL3L1)	85	MCP-4 (CCL13)	89
LDL-associated Phospholipase A2	105	MCP-5 (CCL12)	89
LDL-PLA(2)	105	M-CSF	90
LEC (CCL16)	85	MD-2/LY96	91
LEP-R	86	MDA-7 (Melanoma Differentiation-Associated gene 7 protein)	78
Leptin	86	MDC (CCL22)	91
Leptin Receptor	86	MDC (CCL22) (67 a.a.)	91
Leu-3(a, b)	26	MDC (CCL22) (69 a.a.)	91
Leu-14	26	MEC (CCL28)	92
Leukemia Inhibitory Factor	87	Megakaryocyte colony-stimulating factor	126
Leukocyte Endogenous Mediator (LEM)	58, 59	MEGF7	34
LIF	87	Melanoma differentiation-associated protein-like protein	76
LIGHT	87	Melanoma Growth Stimulatory Activity α	50
LIN28A	87	Melanoma Growth Stimulatory Activity β	50
Lin28-TAT	87	Melanoma Growth Stimulatory Activity γ	50
Liver-Expressed Chemokine	85	Melanoma Inhibitory Activity	92
LIX (CXCL6) (70 a.a.)	45	Melanoma Inhibitory Activity-2	93
LIX (CXCL6) (92 a.a.)	45	Melanoma-derived LPL inhibitor (MLPLI)	87
Lkn-1	97	Membrane Primary Amine Oxidase	130
LMC	85	Mesencephalic Astrocyte-Derived Neurotrophic Factor	88
Long R3 IGF-I	56	Mesothelin	92, 98
Lungkine (CXCL15)	88	MGC108734	131
Luterotropic hormone	110	MGC99561	131
Lutetropin	110	MGDF	126
Lymphocyte Activation Gene-1	85	MGI-1G	45
Lymphocyte antigen 96	91	MGI-1GM	48
Lymphocyte IgE receptor	27	MGI-2	65
Lymphocyte-Activating Factor (LAF)	58, 59	MGI-IM	90
Lymphopoietin 1 (LP-1)	66	MGSA α	50
Lymphotactin (XCL1)	88	MGSA β	50
Lymphotoxin- α (LT- α)	125	MGSA γ	50
Lysobacter Enzymogenes Arg-C	16	MIA	92
MAC2	44	MIA-2	93
Mac25	57	MIAL (Melanoma Inhibitory Activity-like Protein)	105
Macrophage Colony Stimulating Factor	90	MIC-1	47
Macrophage Inflammatory Protein-1 α	94	Midkine	93
Macrophage Inflammatory Protein-1 β	94	MIF	93
Macrophage Inflammatory Protein-1 γ	94	MIG (CXCL9)	94
Macrophage Inflammatory Protein-2	50	MIP-1 α (CCL3)	94
Macrophage Inflammatory Protein-3	96	MIP-1 β (CCL4)	94
Macrophage Inflammatory Protein-3 α	96	MIP-1 γ (CCL9/10)	94
Macrophage Inflammatory Protein 3 β	96	MIP-2	50
Macrophage Inflammatory Protein-4	97	MIP-2 (CXCL2)	50

MIP-2 α	50	Neuroserpin.....	100
MIP-2 β	50	Neurotactin.....	43
MIP-3 (CCL23).....	96	Neurotrophic Factor.....	103
MIP-3 α (CCL20).....	96	Neurotrophic tyrosine kinase.....	115
MIP-3 β (CCL19).....	96	Neurotrophin 4/5 (NT-4/NT-5).....	103
MIP-4 (CCL18).....	97	Neurotrophin-3.....	103
MIP-5 (CCL15).....	97	Neurotrophin-4.....	103
MK.....	93	Neurturin.....	100
MMIF.....	93	Neutrophil Activating Factor (NAF).....	67
MMP-1.....	97	Neutrophil Activating Protein-2.....	99
MMP-2.....	97	Neutrophil Peptide-1.....	102
MMP-3.....	98	NF-HEV.....	79
Monocyte Arg-serpin.....	106	NGF- β	101
Monocyte Chemotactic Protein-1.....	89	NIRF.....	74
Monocyte Chemotactic Protein-2.....	89	NJAC.....	24
Monocyte Chemotactic Protein-3.....	89	NK cell Stimulating Factor Chain 1.....	70
Monocyte Chemotactic Protein-4.....	89	NK cell Stimulating Factor Chain 2.....	70
Monocyte Chemotactic Protein-5.....	89	NKSF.....	70
Monocyte differentiation antigen CD14.....	26	NNT-1/BCSF-3.....	101
Monocyte-Derived Neutrophil Chemotactic Factor (MDNCF).....	67	Noggin.....	102
Monokine Induced by Interferon- γ	94	NOTCH4-like protein.....	34
Mononuclear Cell Factor (MCF).....	58, 59	NOV.....	102
MPF.....	92, 98	Novel Neurtrophin-1/B-Cell-Stimulating Factor-3.....	101
MPIF-1.....	96	NovH.....	102
MPIF-2.....	36	NP.....	100
MRP-1.....	25	NP-1.....	102
MRP2.....	94	NPO.....	100
MSLN.....	92, 98	NRG-1.....	47
MTN-1.....	85	NRN1.....	99
MTS-1.....	105	NRTN.....	100
Mucosae-associated Epithelial Chemokine.....	92	NT-3.....	103
Multi-CSF.....	62	NT-4.....	103
Multiple EGF-like domains protein 7.....	34	NTN.....	100
Multiple Tumor Suppressor 1.....	105	NTRKR1.....	115
Multisynthase complex auxiliary component p43.....	35	Obesity protein (OB).....	86
Mycoplasma Arginine Deiminase.....	16	Obesity Protein (OB) Receptor.....	86
Myeloid differentiation protein-2.....	91	OB-R.....	86
Myeloid-derived growth factor (MYDGF).....	118	OCC1.....	43
Myostatin.....	98	OCC-1.....	43
Myostatin-Propeptide.....	98	OCIF (Osteoclastogenesis Inhibitory Factor).....	104
NAmPRTase (nicotinamide phosphoribosyltransferase).....	133	ODAR (Osteoclast Differentiation and Activation Receptor).....	112
Nampt.....	133	ODF (Osteoclast Differentiation Factor).....	111
Nanog.....	98	ODFR (Osteoclast Differentiation Factor Receptor).....	112
Nanog-TAT.....	98	OKT4(a-f).....	26
NAP-1.....	67	ON.....	119
NAP-2 (CXCL7).....	99	Oncostatin A.....	109
NAP-3.....	50	Oncostatin M.....	104
NC30.....	71	Oncostatin M (196 a.a.).....	104
NCC-1.....	89	Oncostatin M (209 a.a.).....	104
NCC-2.....	51	Oncostatin M (227 a.a.).....	104
NCC-4.....	85	OPG.....	104
Necrosin.....	124	OPGL (Osteoprotegerin Ligand).....	111
NEGF-2.....	93	OSM.....	104
Nephroblastoma Overexpressed gene.....	102	Osteoblast-Specific Factor 1 (OSF-1).....	109
Nephropontin.....	104	Osteogenic Protein-1 (OP-1).....	23
Nerve Growth Factor-2 (NGF-2).....	103	Osteogenin.....	22
Nesfatin-1.....	99	Osteopontin.....	104
Neu differentiation factor (rat).....	52	Osteoprotegerin.....	104
Neublastin.....	17	Osteosarcoma-Derived Growth Factor (ODGF).....	107
Neuregulin1 (NRG1- β 1).....	52	OTOR.....	105
Neuritin.....	99	Otoraplin.....	105
Neuropoietin.....	100	sOX40 Ligand.....	105

索引 (続き)

OX40L	105	Platelet-Derived Growth Factor-AB	107
p16-INK4	105	Platelet-Derived Growth Factor-BB	107
p16INK4A	105	Platelet-Derived Growth Factor-CC	107
p16-INK4a	105	Pleiotrophin	109
p16-INK4a-TAT	105	PIGF	109
p28	79	PIGF-1	109
p40 cytokine	68	PIGF-2	110
p55	126	PIGF-3	110
p60	126	pluripoietin	45
P600	71	Pluripoietin- α	48
p75	126	PNR2	120
p80	126	Polyergin	121
PACE	43	pre-B-cell factor	66
PAF 2-acylhydrolase	105	Pre-pro-megakaryocyte-potentiating factor	92, 98
PAF acetylhydrolase	105	Programmed cell death 1 Ligand 1 (PDCD1L1)	106, 108
PAF-AH	105	Programmed cell death 1 ligand 2 (PDCD1 ligand 2)	108
PAI-1	106	Programmed cell death protein 1 (PDCD1)	108
PAI-2	106	Programmed Death Ligand 1	108
Parathyroid Hormone-related Protein	111	Programmed Death Ligand 2	108
PARC	97	PROK1	34
PBEF (Pre-B-cell colony-enhancing factor)	133	PROK2	110
PBP (parent molecule)	99	Prokineticin 1	34
PBSF	117	Prokineticin-2	110
P-cell stimulation factor	62	Prolactin	110
PCGF	107	Prostate Differentiation Factor (PDF)	47
PCSK3	43	Prostatropin	40
PD-1	106, 108	Protease inhibitor 12	100
PD-1 Fc	108	Protease inhibitor 5	88
PD-1 ligand 2	108	Protein Bv8 homolog	110
PDCD1L2	108	pS2 protein	120
PDCD1LG2	108	PSP	108
PDGF-AA	107	PSPN	108
PDGF-AB	107	PTHrP	111
PDGF-BB	107	PTN	109
PDGF-CC	107	PTX1	30
PD-L1 Fc	108	PWTSR	111
PD-L2 Fc	108	sRANK Ligand	111
PDLB7DC	108	sRANK Receptor	112
PECAM-1	108	RANTES (CCL5)	112
PEDF	108	RARRES2	29
pentraxin 1	30	receptor-related 1	115
Persephin	108	Receptor-tyrosine-kinase-like orphan receptor 1	115
PF-4 (CXCL4)	109	Regulation upon Activation Normal T-cell Express Sequence	112
PGF	109	REIC	32
PGFL	109, 110	Relaxin-2	113
PIG4	16	Relaxin-3	113
PIGF	109	RELM α	114
Pigment Epithelium-Derived Factor	108	RELM β	114
Pituitary growth hormone	51	RELM γ	114
PK2	110	Resistin	115
PLAB	47	Resistin-like α	114
Placenta Growth Factor-1	109	Resistin-like β	114
Placenta Growth Factor-2	110	Resistin-like γ	114
Placenta Growth Factor-3	110	RLN2	113
Placenta Protein 12 (PP12)	57	Roof plate-specific Spondin-1	111
Placental TGF β	47	Roof plate-specific Spondin-2	111
Plasma protease C1 inhibitor	24	Roof plate-specific Spondin-3	111
Plasminogen Activator Inhibitor-1	106	ROR1	115
Plasminogen Activator Inhibitor-2	106	RSPO1	111
Platelet Endothelial Cell Adhesion Molecule	108	RSPO2	111
Platelet Factor-4	109	RSPO3	111
Platelet-Derived Growth Factor-AA	107	R-Spondin-1	111

R-Spondin-2	111	soluble CD30 Ligand	27
R-Spondin-3	111	soluble CD34	27
SAP1	20	soluble CD40 Ligand	28
Sarcoma growth factor	121	soluble CD100	28
SARP-2	43	soluble DLL-1	32
Scatter Factor (SF)	52	soluble DLL-4	32
SCF	116	soluble Fas Ligand	39
SCGF- α	117	soluble Fas Receptor	39
SCGF- β	117	soluble IL-2 Receptor alpha	61
Sclerostin	117	soluble IL-4 Receptor alpha	64
SCM-1a	88	soluble IL-6 Receptor alpha	66
SCYA19	96	soluble Interleukin-2Ra	61
SCYE1	35	soluble Interleukin-4Ra	64
SDF-1 α (CXCL12)	117	soluble Interleukin-6Ra	66
SDF-1 β (CXCL12)	117	soluble RANK Receptor	112
Secreted Apoptosis Related Protein-2	43	soluble Receptor Activator of NF- κ B Ligand	111
Secreted Frizzled Related Protein-1	43	soluble TRAIL Receptor-1	128
Secreted frizzled-related protein 4	43	soluble TRAIL Receptor-2	128
Secreted phosphoprotein 1	104	soluble Tumor Necrosis Factor Type I	126
Secreted Protein Acidic and Rich in Cysteine	119	soluble Tumor Necrosis Factor Type II	126
Secretoglobulin family 1A member 1	130	Somatamedin A	56
SELE	38	Somatamedin C	56
SEMA3A	118	Somatotropin	51
SEMAD	118	Sonic Hedgehog (Shh)	118
Semaphorin 3A	118	SOST	117
Semaphorin-4D	28	SOST1	117
Seraspenide	122	Sox2	119
Serpin B2	106	Sox2-TAT	119
Serpin E1	106	SPARC/Osteonectin	119
Serpin G1	24	Spasmolysin	120
Serpin I1	100	Spasmolytic Polypeptide (SP)	120
SerpinB5	88	Spinal Cord-Derived Growth Factor (SCDGF)	107
SerpinF1	108	SPP-1	104
Serum amyloid A apolipoprotein	16	SRPSOX	31
Serum amyloid A protein (SAA)	16	SSAO	130
Serum amyloid A-1 protein	16	Staphylococcus Glu-C	48
Serum-spreading factor	133	STCP-1	91
Sex determining Region Y (SRY)-box 2	119	Steel Factor (SF)	116
SF-20	118	Stem Cell Factor	116
Siglec-2	26	Stem Cell Growth Factor- α	117
SIS-delta	112	Stem Cell Growth Factor- β	117
SK	32	Stromal-Cell Derived Factor-1 α	117
Skin-Antimicrobial Peptide 1	20	Stromal-Cell Derived Factor-1 β	117
Skinkine	30	Stromelysin-1	98
SL-1	98	T β -4	122
S-LAC lectin-1	44	TAC-antigen	61
SLC	38	TACI	119
SLE1	108	TAF α -2	119
SLEB2	106, 108	TALL-1	18
SLIL3	118	TALL-2	16
Slit homolog 2 protein	118	TARC (CCL17)	120
Slit2-N	118	Tazarotene-Induced Gene 2 (TIG2)	29
Smag-82	40	TB4X	122
Small inducible cytokine subfamily E member 1	35	T-BAM	28
SMRP	92, 98	TBE-1	97
soluble CD4	26	TCA-3	53
soluble CD8 α	26	T-cell Activation-2	85
soluble CD14	26	T-cell antigen ILA	17
soluble CD22	26	T-cell Growth Factor (TCGF)	60
soluble CD23	27	T-cell growth factor p40	68
soluble CD27 Ligand	27	T-cell interferon	54
soluble CD28 Fc	27	T-cell surface antigen T4/Leu-3	26

索引 (続き)

T-cell surface glycoprotein CD4	26	TNFRSF10A	128
T-cell surface glycoprotein CD8 alpha chain	26	TNFRSF10B	128
T-cell-specific surface glycoprotein CD28	27	TNFRSF11A	112
TECK (CCL25)	120	TNFRSF11B	104
TF	123	TNFRSF12A	129
TF1	120, 123	TNFRSF13B	119
TFF-1	120	TNFRSF13C	19
TFF-2	120	TNFRSF17	19
TFF-3	120	TNFSF1B	125
TFI	120	TNFSF2	124
TGF-type 1	121	TNFSF4	105
TGF- α	121	TNFSF5	28
TGF- β 1	121	TNFSF6	39
TGF- β 1-stimulated clone 36	43	TNFSF7	27
TGF- β 2	121	TNFSF8	27
TGF- β 3	121	TNFSF9	17
TGIF	69	TNFSF10	127
THANK	18	TNFSF11	111
THBD	122	TNFSF12	129
THPH11	52	TNFSF13	16
Thrombomodulin	122	TNFSF13B	18, 119
Thromboplastin	123	TNFSF14	87
Thrombopoietin	126	TNFSF15	123
THSD2	111	TNFSF18	13
Thymic Stromal Lymphopoietin	129	TNFSF20	18
Thymosin- β 4	122	TNFSFR14	53
Thymus and Activation-Regulated Chemokine	120	TNSF1A	124
Thymus Expressed Chemokine	120	TOLL	124
TIGAR	122	Toll-Like Receptor 3	124
TIGAR-TAT	122	Toll-like Receptor 4	124
TIMP-1	122	TP44	27
TIMP-2	123	TP53I4	16
Tissue Factor	123	TP53-Induced Glycolysis and Apoptosis Regulator (TIGAR)	122
Tissue Inhibitor of Metalloproteinases 1	122	TPO	126
Tissue Inhibitor of Metalloproteinases 2	123	TR1	104
TL-1A	123	TR2	53
TL2	127	TRAIL	127
TL-6	13	sTRAIL Receptor-1	128
TLR-3	124	sTRAIL Receptor-2	128
TLR-4	124	sTRAIL/Apo2L	127
T-lymphocyte differentiation antigen T8/Leu-2	26	TRANCE (TNF-Related Activation-induced Cytokine)	111
TM	122	TRANCE Receptor	112
TMIGD2/CD28H	124	Transforming Growth Factor- α	121
TMSB4	122	Transforming Growth Factor- β 1	121
TMSB4X	122	Transforming Growth Factor- β 2	121
TNF- α	124	Transforming Growth Factor- β 3	121
TNF- β	125	Transforming protein KS3	40
sTNF Receptor Type I	126	Transin-1	98
sTNF Receptor Type II	126	Transmembrane Activator and CAML Interactor	119
TNF-Related Apoptosis-Inducing Ligand	127	Transmembrane and immunoglobulin domain-containing protein 2	124
TNF-related Weak Inducer of Apoptosis	129	TRAP	28
TNF-related Weak Inducer of Apoptosis Receptor	129	TRDL-1	16
TNFAR	126	Trefoil Factor 1	120
TNFR1	126	Trefoil Factor 2	120
TNFR2	126	Trefoil Factor 3	120
TNFR60	126	TREM-1 Fc	128
TNFR75	126	TRF	64
TNFR80	126	TRICK2A	128
TNFRSF1A	126	TRICKB	128
TNFRSF1B	126	Triggering receptor expressed on monocytes 1	128
TNFRSF6	39	TSC-36	43
TNFRSF9	17	TSF	70

TSG	128	WFIKKNRP	45
TSLP	129	Wingless-type MMTV (Mouse Mammary Tumor Virus) integration site family member 3a	134
Tumor Necrosis Factor- α	124	WISP-1	134
Tumor Necrosis Factor- β	125	WISP-3	134
TWEAK	129	WNT-1	134
TWEAK Receptor	129	Wnt-1-induced secreted protein	134
Twisted Gastrulation Protein	128	Wnt-1 Inducible Signaling Pathway protein-1	134
TXGP1	105	Wnt-1 Inducible Signaling Pathway protein-3	134
Type I Interferon	54	Wnt-1 proto-oncogene protein (precursor)	134
Type II interferon	54	WNT14B	135
Tyrosine-protein kinase transmembrane receptor ROR1	115	WNT15	135
UNQ1833/PRO3446	49	Wnt-3a	134
UNQ2222/PRO248	46	Wnt-7a	135
UNQ6973/PRO21956	135	Wnt-9b	135
UP	130	Za11	77
UP-1	130	ZCCHC1	87
URG	33	zFGF5	40
Urinary protein 1	130	Zneu1	34
Urine protein 1	130	ZTNF4	18
Urogastrone	33		
Urokinase Inhibitor	106		
Uropontin	104		
Uteroglobin	130		
V75	133		
V8 Protease	48		
VAP-1	130		
Vascular Adhesion Protein-1	130		
Vascular Cell Adhesion Molecule 1	131		
Vascular Endothelial Growth Factor 121	131		
Vascular Endothelial Growth Factor 165	131		
Vascular Endothelial Growth Factor-B	132		
Vascular Endothelial Growth Factor-C	132		
Vascular Endothelial Growth Factor-D	133		
Vaspin	130		
VBCH	117		
VCAM	131		
VCAM1	131		
VCAM-1	131		
VCAM1B	131		
VECAM1	131		
VEGF	131		
VEGF-A	131		
VEGF-B	132		
VEGF-C	132		
VEGF-D	133		
VEGF-related factor	132		
VEGI	123		
VE-statin	34		
VF	133		
VG-1-related protein	23		
VGR	23		
Vgr-2	46		
Vim	133		
Vimentin	133		
Visceral adipose tissue-derived serpin	130		
Visfatin	133		
Vitronectin	133		
VPF	131		
VRF	132		
VRP	132		
VTN	133		

ペプロテック ワールドワイド

PEPROTECH, INC.

Corporate Headquarters

5 Crescent Avenue
Rocky Hill, NJ 08553-0275, USA
Phone: (609) 497-0253
Fax: (609) 497-0321
Email: info@peprotech.com

PEPROTECH MEXICO

Vermont 34 Oficina 4
Colonia, Napoles
C.P. 03810, México, DF
Phone: +52 55 5672 0389
Fax: +52 55 5672 0388
Email: pepromex@prodigy.net.mx

PEPROTECH BRAZIL

Rua Florino Peixoto 2444
Alto de Boa Vista
14025-220 Ribeirão Preto, SP, Brazil
Phone: (16) 3620-1251
Fax: (16) 3621-1991
Email: peprotech@funpecrp.com.br

BIOGEMS

A PeproTech Brand

31238 Via Colinas Suite A3,
Westlake Village, CA 91362, USA
Phone: (818) 338-3312
Fax: (818) 338-3316
Email: info@bio-gems.com

PEPROTECH EC

European Headquarters

PeproTech House
29 Margravine Road
London W6 8LL, UK
Phone: +44 (0)20 7610 3062
Fax: +44 (0)20 7610 3430
Email: info@peprotech.co.uk

PEPROTECH FRANCE

12 rue Paul Chatrousse
92200 Neuilly-Sur-Seine
France
Phone: +33 (0)1 46 24 58 20
Fax: +33 (0)1 46 98 51 41
Email: info@peprotechfr.com

PEPROTECH GERMANY

Oberaltenallee 8
22081 Hamburg, Germany
Phone: +49 40 734 35 77 70
Fax: +49 40 734 35 77 79
Email: info@peprotech.de

PEPROTECH NORDIC

Klarabergsviadukten 70
107 24 Stockholm, Sweden
Phone: +46 (0)8 640 41 07
Fax: +46 (0)8 640 41 09
Email: info@peprotech.se

PEPROTECH CZECH

Phone: +420-225-992-284
Fax: +420-225-992-201
Email: info@peprotech.cz

PEPROTECH AUSTRIA

Schwendergasse 17
1150 Wien, Österreich
Phone: +43 (0)1 405 9696
Fax: +43 (0)1 405 9898
Email: info@peprotech.at

PEPROTECH ASIA

APAC Headquarters

12 Hamada Street ,Tamar Building
Rehovot 76703, Israel
Phone: +972 (0) 8 946 0948
Fax: +972 (0) 8 946 0861
Email: info@peprotechasia.com

PEPROTECH KOREA

10F, YTN Newsquare
76 Sangamsan-ro, Mapo-gu
Seoul 03926, Korea
Phone: +82 2 3210 2808
Fax: +82 2 3210 2835
Email: info@peprotech.co.kr

PEPROTECH CHINA

Room M10, 4F, North Building A1
No. 218, Xinghu St, SIP
Suzhou, Jiangsu Province
P. R. China, 215123
Hotline: 40000 53055
Phone: +86 512 6832 5983
Fax: +86 512 6832 5993
Email: china@peprotech.com

メモ



5 Crescent Avenue
Rocky Hill, NJ 08553
USA

Phone: +1 (609) 497-0253
Fax: +1 (609) 497-0321
Email: japan@peprotech.com

www.peprotech.com

 **funakoshi**

FRONTIERS IN LIFE SCIENCE

フナコシ株式会社 〒113-0033 東京都文京区本郷2丁目9番7号

<http://www.funakoshi.co.jp/> e-mail : info@funakoshi.co.jp

試薬に関して : Tel.03-5684-1620 Fax.03-5684-1775
e-mail : reagent@funakoshi.co.jp

機器に関して : Tel.03-5684-1619 Fax.03-5684-5643
e-mail : kiki@funakoshi.co.jp

