

Product Name: Endothelin 1 (human, porcine)

Catalog No.: 1160

Batch No.: 19

CAS Number: 117399-94-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₀₉H₁₅₉O₃₂N₂₅S₅
Batch Molecular Weight: 2492
Physical Appearance: White lyophilised solid
Net Peptide Content: 80.5%
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in water
Storage: Desiccate at -20°C
Peptide Sequence:

Cys-Ser-Cys-Ser-Ser-Leu-Met-Asp-Lys-Glu-
Cys-Val-Tyr-Phe-Cys-His-Leu-Asp-Ile-Ile-Trp

2. ANALYTICAL DATA

HPLC: Shows 99% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical			Actual		
Ala			Lys	1.00	1.00
Arg			Met	1.00	0.99
Asx	2.00	2.13	Phe	1.00	0.90
Cys	4.00	3.42	Pro		
Glx	1.00	1.05	Ser	3.00	2.70
Gly			Thr		
His	1.00	0.94	Trp		
Ile	2.00	0.85	Tyr	1.00	0.85
Leu	2.00	2.14	Val	1.00	0.85

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Tocris Bioscience is an R&D Systems company

USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373
www.RnDSystems.com



Product Name: Endothelin 1 (human, porcine)

Catalog No.: 1160

Batch No.: 19

CAS Number: 117399-94-7

Description:

Endogenous potent vasoconstrictor peptide that is an agonist at ET_A and ET_B receptors. Modulates vascular tone.

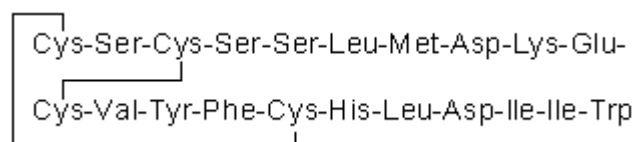
Physical and Chemical Properties:

Batch Molecular Formula: C₁₀₉H₁₅₉O₃₂N₂₅S₅

Batch Molecular Weight: 2492

Physical Appearance: White lyophilised solid

Peptide Sequence:



Storage: Desiccate at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in water

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Net Peptide Content: 80.5% (Remaining weight made up of counterions and residual water).

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such as Cys, Met, Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 µm filter to remove potential bacterial contamination whenever possible.

References:

Yanagisawa et al (1988) Primary structure, synthesis, and biological activity of rat endothelin, and endothelium-derived vasoconstrictor peptide. *Proc.Natl.Acad.Sci.U.S.A.* **85** 6964. PMID: 3045827.

Yanagisawa and Masaski (1989) Molecular biology and biochemistry of the endothelins. *TIPS* **10** 374. PMID: 2690429.

Inoue et al (1989) The human endothelin family: three structurally and pharmacologically distinct isopeptides predicted by three separate genes. *Proc.Natl.Acad.Sci.U.S.A.* **86** 2863. PMID: 2649896.

Servitja et al (1998) Involvement of ET_A and ET_B receptors in the activation of phospholipase D by endothelins in cultured rat cortical astrocytes. *Br.J.Pharmacol.* **124** 1728. PMID: 9756390.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Tocris Bioscience is an R&D Systems company

USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373

www.RnDSystems.com

