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MATRIXOME

Optimized for Human ES and iPS Cell Culture

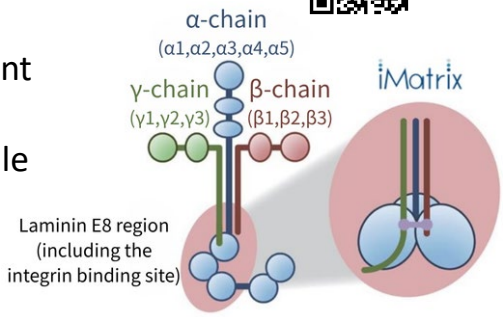
iMatrix-511

iMatrix-511 silk

https://www.funakoshi.co.jp/exports_contents/ **46137**

iMatrix-511 is a high-purity recombinant Laminin-511 E8 fragment designed for feeder-free culture and single-cell passaging of human iPS and ES cells. It helps simplify cell culture workflows while supporting efficient cell expansion.

* For **Research Use Only (RUO).**



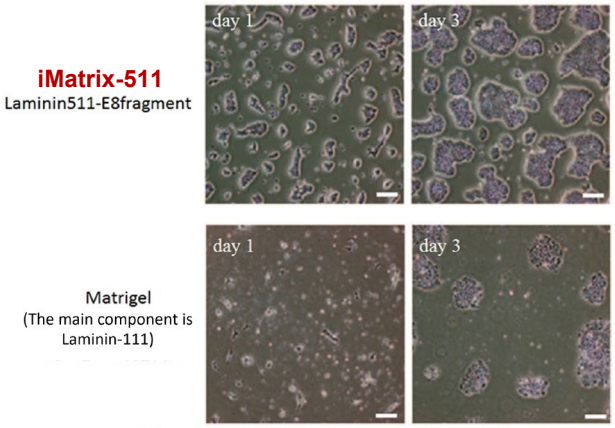


Supports feeder-free culture

Supports single-cell passaging

Suitable for **human iPS and ES cells**

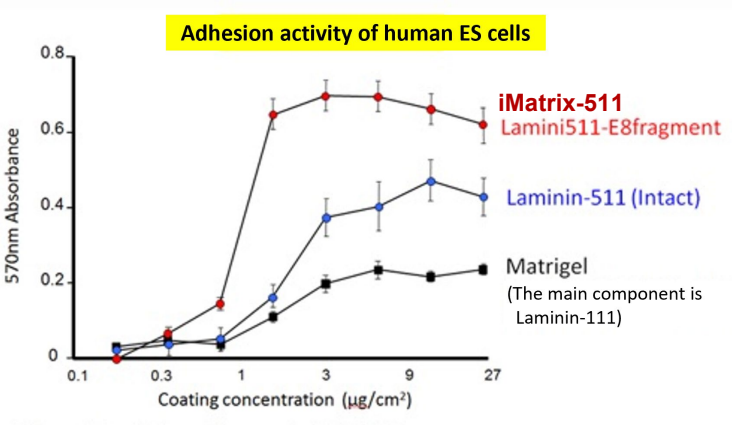
No ROCK inhibitor is required during medium changes after passaging



(Miyazaki et al., Nature Commun. 3; 1236, 2012)
Japanese patent application No.2009-234583/PCTJP2010-067618/WO2011-043405

Single Human ES Cells Rapidly Adhere and Proliferate on Laminin-511 E8

Human ES cells were passaged on Laminin-511 E8 fragments and other cell culture substrates. When human ES cell colonies were dissociated into single cells during passaging, rapid cell adhesion and proliferation were observed on Laminin-511 E8 fragments.



(Miyazaki et al., Nature Commun. 3; 1236, 2012)

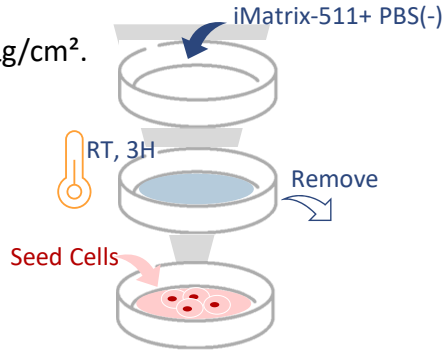
Laminin-511 E8 Fragment Promotes Stronger Cell Adhesion than Full-Length Laminin-511

The adhesion activity of the Laminin-511 E8 fragment was compared with that of full-length Laminin-511 and other cell culture substrates. The horizontal axis indicates the concentration of each cell culture substrate, while the vertical axis indicates absorbance at 570 nm. The results demonstrated that the Laminin-511 E8 fragment exhibited the highest adhesion activity among the substrates tested.

How to Use iMatrix-511

1. **Dilute & Coat**
   Dilute iMatrix-511 in sterile PBS(-) and add it to the culture vessel at 0.1–1.5 µg/cm².
2. **Incubate**
   Incubate at room temperature for 3 hours.
   Remove the coating solution. No washing required.
3. **Seed Cells**
   Add the cell suspension in culture medium and begin incubation.

Note: Optimal coating concentration may vary depending on the cell line and application.



Product Specifications

[Manufacturer : MAX]

Product name	iMatrix-511		iMatrix-511 **silk**
Product code	892011	892012	892021
Size	2 x 175 µg	6 x 175 µg	6 x 175 µg
Expressed in/ Produced by	Recombinant CHO-S cells		Recombinant silkworm
Derived from	CHO-S cell culture supernatant		Silkworm cocoon
Transgene	Human Laminin-511 E8 fragment		
Purity	≥95%		
Concentration	0.5 mg/mL		
Dissociation constant	≤10 nM		



* Shelf life: 2 years from the date of manufacture. * For **Research Use Only (RUO).**

Ready-to-use liquid — no dilution required

Product name	Product code	Size
Easy iMatrix-511	892018	100 ml
Easy iMatrix-511 **silk**	892024	100 ml

* These products contain recombinant human serum albumin.

100 mL = Approx. 16 × 6-well plates
(based on a coating density of 0.25 µg/cm²)

For more information on **Easy iMatrix**, scan the QR code >>>

iMatrix Other Products

Product name	Product code	Recommended Cells	Application
iMatrix-111	892071	hepatoblast-like cells (HLCs)	Directed Differentiation of Human iPSCs into Hepatocyte-Like Cells
iMatrix-221	892061	cardiomyocytes, skeletal muscle cells	Purification and Maintenance Culture of Cardiomyocytes and Skeletal Muscle Cells
iMatrix-332	892031	skin cells, corneal epithelial cells	Differentiation of Human iPSCs into Corneal Epithelial Cells
iMatrix-411	892041	vascular endothelial cells	Maintenance and Expansion Culture of Pluripotent Stem Cells

* Package size for all products: 2 x 175 µg

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Funakoshi Co., Ltd. (JAPAN)

www.funakoshi.co.jp/exports
Tel: +81-3-5684-6296
E-mail: export@funakoshi.co.jp

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