

For research use only
Not for use in diagnostic procedures

iMatrix-Palette

Product No. 892 091



Version 002
Store at 2-15°C

Product description: iMatrix-Palette is a combination kit containing iMatrix-111, iMatrix-221, iMatrix-332, iMatrix-411, and iMatrix-511. Each item is the recombinant human laminin E8 fragment protein expressed in Chinese Hamster Ovary (CHO)-S cells, comprising the integrin-binding site of each laminin isoform. The integrin-binding activity of each item is equivalent to that of each full-length laminin isoform. Each laminin isoform has the different activity and specificity to integrin isoforms.

Content:

iMatrix-111	Recombinant human laminin-111 E8 fragment protein
iMatrix-221	Recombinant human laminin-221 E8 fragment protein
iMatrix-332	Recombinant human laminin-332 E8 fragment protein
iMatrix-411	Recombinant human laminin-411 E8 fragment protein
iMatrix-511	Recombinant human laminin-511 E8 fragment protein

Protein concentration:

iMatrix-111 : 20 mM Phosphate buffer, 250 mM NaCl
iMatrix-221 : PBS(-)
iMatrix-332 : 20 mM Phosphate buffer, 500 mM NaCl
iMatrix-411 : PBS(-)
iMatrix-511 : PBS(-)

Amount: 175 µg / 0.35 mL / tube

Storage: Store at 2°C to 15°C, protect from light.

Expiration date and solvent: The shelf life is 2 years from the manufacturing date of each item. The information about Lot number and expiration date is printed on the carton. The information about solvent is described in the CoA of each item. The documents of CoA can be downloaded from the website of MATRIXOME, Inc. Please use the URL or QR code below.

Methods of use: iMatrix can be used by coating onto culture vessels. Each laminin isoform E8 fragment possesses the different activity and specificity to integrin isoforms. The adhesive property of cells to each laminin isoform E8 fragment is dependent on the expression pattern of integrin isoforms in the cells. Thus the optimum coating density may differ by cell-type, cell-line, differentiated state, or purpose. Insufficient coating density may result in the detachment of cells, varied cell conditions, and uncontrolled cell differentiation, whereas the excessive coating density may lead to difficulty in detaching cells for passage. Each manual of iMatrix can be

downloaded from the website of MATRIXOME, Inc. Please use the URL or QR code below.

Table. Specificity of iMatrix to integrin isoforms

	alpha chain	Integrin isoforms	Examples of adherent cells
iMatrix-111	α1	α6β1, α7X2β1	neural cells, hepatoblast
iMatrix-221	α2	α7X2β1	cardiomyocyte, skeletal muscle cells
iMatrix-332	α3	α3β1, α6β1, α6β4	epithelial cells, corneal epithelial cells
iMatrix-411	α4	α6β1, α3β1	vascular endothelial cells
iMatrix-511	α5	α6β1, α3β1	pluripotent stem cells, neural cells

References:

Nishiuchi R. *et al.* (2006) *Matrix Biol.* **25** (3), 189-97
Taniguchi Y. *et al.* (2009), *J. Biol. Chem.* **284** (12): 7820-31
Miyazaki T. *et al.* (2012) *Nat. Commun.* **3**, 1236
Israeli-Rosenberg S. *et al.* (2014), *Circ. Res.* **114** (3): 572-86
Ohta R. *et al.* (2016), *Sci. Rep.* **6**: 35680
Takayama K. *et al.* (2017) *Hepatol. Commun.* **1** (10), 1058-69
Shibata S. *et al.* (2020) *Stem Cell Reports* **14** (4), 663-76

Caution: For research use only. Not intended for human use. In the event of accidental ingestion or contact with the eyes, immediately wash the affected area and seek medical attention.

Product information: Current information including references and Q&A are available on the website of MATRIXOME, Inc. Please use the URL or QR code below.

Designed by: MATRIXOME, Inc.

3-2 Yamadaoka, Suita, Osaka 565-0871, Japan
Institute for Protein Research, Osaka University
Tel: +81-6-6877-0222 Fax: +81-6-6877-0002

Contact: <https://matrixome.co.jp/en/contact>

URL: <https://matrixome.co.jp/en/>

Download: <https://matrixome.co.jp/en/download>



Manufactured by: Nippi, Incorporated
1-1-1 Senju Midori-cho, Adachi, Tokyo 120-8601, Japan
URL: <https://www.nippi-inc.co.jp/>