

For research use only  
Not for use in diagnostic procedures



# iMatrix-411

Product No. 892 041, 892 046 350 µg  
Product No. 892 042, 892 045 1,050 µg

Version 003  
Store at 2-15°C

**Product description:** iMatrix-411 is a recombinant human laminin-411 E8 fragment protein expressed in Chinese Hamster Ovary (CHO)-S cells. iMatrix-411 contains the integrin-binding site of the laminin-411 molecule. iMatrix-411 is a useful cell culture substrate for proliferation and differentiation of vascular endothelial cells and bile duct epithelial cells. iMatrix-411 is also useful for the culture of other cells adhering to laminin-411.

**Content:** Recombinant human laminin-411 E8 fragment protein in PBS(-)

**Concentration:** 0.5 mg/mL

**Amount:** 175 µg / 0.35 mL / tube  
Product No. 892 041, 892 046 350 µg / 2 tubes  
Product No. 892 042, 892 045 1,050 µg / 6 tubes

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

**Expiration date:** The shelf life is 2 years from the date of manufacture. The expiration date is printed on the outer carton.

**Activity:** The dissociation constant (Kd) for the binding with integrin α6β1 is 10 nM or less.

**Methods of use:** By the following method, iMatrix-411 can be coated onto a culture vessel. **The optimum coating density may differ by cell-type, cell-line, medium selected, or purpose.** Insufficient coating density may result in the detachment of cells and varied cell conditions while the excessive coating density may lead to difficulty in detaching cells for passage.

Determine the optimal coating density. 0.5 µg/cm<sup>2</sup> is a standard but test between 0.1 and 1.5 µg/cm<sup>2</sup>.

- 1) Dilute iMatrix-411 with PBS(-). Use the diluted iMatrix-411 immediately. To coat with 0.5 µg/cm<sup>2</sup> onto a 6-well plate with 9.6 cm<sup>2</sup>/well, dilute 9.6 µL of iMatrix-411 with 2 mL of PBS(-) per well.
- 2) Place the diluted iMatrix-411 into a culture vessel and incubate either at 37°C for 1 h, or at room temperature for 3 h, or at 4°C overnight.
- 3) Aspirate the coating solution. Then, immediately seed your cells. **Do not allow the coated surface to dry.**

\*If you face difficulties in detaching cells for passage, re-adjust the conditions (e.g., reduce the coating density).

## References:

- Nishiuchi R. *et al.* (2006), *Matrix Biol.* **25** (3): 189-97  
Ohta R. *et al.* (2016), *Sci. Rep.* **6**: 35680  
Takayama K. *et al.* (2016), *Biochem. Biophys. Res. Commun.* **474** (1): 91-6  
Tang J. and Saito T. (2018), *BioMed. Res. Int.* **2018**: 9465383

**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/>



**Manufactured by:** Nippi, Incorporated  
1-1-1 Senju Midori-cho, Adachi, Tokyo 120-8601, Japan