For research use only
Not for use in diagnostic procedures

iMatrix-332

Product No. 892 031 350 µg
Product No. 892 032 1,050 µg

Version 002
Store at 2-15°C

Product description: iMatrix-332 is a recombinant human laminin-332 E8 fragment protein expressed in Chinese Hamster Ovary (CHO)-S cells. iMatrix-332 contains the integrin-binding site of the laminin-332 molecule. iMatrix-332 is useful for differentiation of iPSC and ESCs into corneal epithelial cells. iMatrix-332 also supports the culture of the other cells adhering to laminin-332 such as keratinocytes.

Content: Recombinant human laminin-332 E8 fragment protein in 20 mM phosphate buffer, 500 mM NaCl

Protein concentration: 0.5 mg/mL

Amount: 175 µg / 0.35 mL / tube
Product No. 892 031 350 µg / 2 tubes
Product No. 892 032 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 carton.

Activity: The dissociation constant (Kd) for the binding with integrin α3β1 is 5 nM or less.

Methods of use: By the following method iMatrix-332 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.

Coating protocol

Determine the optimal coating density. 0.5 µg/cm² is a standard but test between 0.1 and 1.5 µg/cm².

1) Dilute iMatrix-332 with PBS(-). Use the diluted iMatrix-332 immediately. To coat with 0.5 µg/cm² onto a 6-well plate with 9.6 cm²/well, dilute 9.6 µL of iMatrix-332 with 2 mL of PBS(-) per well.
2) Place the diluted iMatrix-332 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).
*Coating protocol is illustrative only.

References:

Nishiuchi R. *et* al. (2006) *Matrix Biol.* **25** (3), 189-97
Miyazaki T. *et al.* (2012) *Nat. Commun.* **3**, 1236
Shibata S. *et al.* (2018) *Cell Rep.* **25** (6), 1668-79
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.

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