For research use only
Not for use in diagnostic procedures

iMatrix-511

Product No. 892 011 350 µg
Product No. 892 012 1,050 µg

Version 010
Store at 2-15°C

Product description: iMatrix-511 is a recombinant human laminin-511 E8 fragment protein expressed in Chinese Hamster Ovary (CHO)-S cells. iMatrix-511 contains the integrin-binding site of the laminin-511 molecule. iMatrix-511 is a useful cell culture substrate for feeder-free culture and single-cell passage of ES cells and iPS cells, facilitating stable culture expansion. iMatrix-511 is also useful for the culture of other cells adhering to laminin-511.

Content: Recombinant human laminin-511 E8 fragment protein in PBS(-)

Concentration: 0.5 mg/mL

Amount: 175 µg / 0.35 mL / tube
Product No. 892 011 350 µg / 2 tubes
Product No. 892 012 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 either of the following methods, iMatrix-511 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.

A. Pre-coating method

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-511 with PBS(-). Use the diluted iMatrix-511 immediately. To coat with 0.5 µg/cm² onto a 6-well plate with 9.6 cm²/well, dilute 9.6 µL of iMatrix-511 with 2 mL of PBS(-) per well.
2) Place the diluted iMatrix-511 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.**

B. Pre-mixing method

Determine the optimal coating density for cell culture. The standard density is 0.25 µg/cm² but test between 0.1 and 1.5 µg/cm². The optimal coating density may be affected by the medium and cell density of the cell suspension.

1) Add iMatrix-511 to the cell suspension. To coat with 0.25 µg/cm² onto a 6-well plate with 9.6 cm²/well, add 4.8 µL of iMatrix-511 to 2 mL of the cell suspension per well.
2) Place the cell suspension containing iMatrix-511 into a culture vessel.

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

References:

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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
E-mail: info@matrixome.co.jp
URL: http://www.matrixome.co.jp/en/

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