

iMatrix-221

Code No. 892 061, 892 062

ver. 001

Product Information: iMatrix-221 is a recombinant human laminin-221 E8 fragment expressed by CHO-S cell (Thermo Fisher Scientific). Laminin-221 is abundant in basement membranes surrounding cardiac and skeletal muscle cells, and binds to the cell membrane receptor integrin $\alpha 7 \times 2 \beta 1$.

Content: Recombinant human laminin-221 E8 fragment

Amount: 175 μ g/tube, six tubes

Concentration: 0.5 mg/mL

Form: Liquid solution (solvent: PBS (-))

Storage and Stability: The iMatrix-221 is stable at +2 to +15°C at least until the expiration date printed on the label. Protect from light. Avoid freeze-thaw cycles.

Activity: The dissociation constant of iMatrix-221 with integrin $\alpha 7 \times 2 \beta 1$ is 10 nM or less.

Application: iMatrix-221 can be used as cell culture substrate for various cell types including ES/iPS cells.

Procedure

- 1) Briefly spin down.
- 2) Dilute the iMatrix-221 solution with sterile PBS (-). The concentration of 0.5 μ g/cm² is recommended. The optimum coating concentration is dependent on cells. Please

adjust the concentration.

- 3) For example, for one well of a 6-well plate (9.6 cm²/well; 0.5 μ g/cm²), add 9.6 μ L of iMatrix-221 solution (4.8 μ g of protein) in 1.99 mL of PBS (-).
- 4) Add 2 mL of the diluted iMatrix-221 solution to the well.
- 5) Incubate either at 37°C for 1 h, at room temperature for 3 h, or at 4°C overnight.
- 6) Remove excess solution from the coated surface.
- 7) Immediately plate cells at desired density. No rinsing is required before cell seeding. *Don't dry up the coated dishes.

****Problems with cell attachment can be avoided by the following additional procedure.** Before Step 6, add 1.5 mL/well of PBS (-) or medium containing albumin (0.5 mg/mL) to the wells. Then, without incubation, proceed to Step 6.

References

- Nishiuchi R. et al., *Matrix Biol.*, **25**: 189-97, 2006
- Taniguchi Y. et al., *J. Biol. Chem.* **284**: 7820-31, 2009
- Israeli-Rosenberg S. et al., *Circ. Res.*, **114**: 572-586, 2014

Regulatory Disclaimer: This product is not intended to diagnose, treat, cure, or prevent any diseases.

AMSBIO | www.amsbio.com | info@amsbio.com