

iMatrix-511

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

Version 009
 Store at 2-15°C
 Protect from light

Background Information

Laminin-511 is well known to bind to the integrin α6β1 which is located on the cell surface. iMatrix-511 is recombinant Laminin511-E8 fragments.

Content

Recombinant Human Laminin511-E8 Fragments

Amount

175 µg / tube (892 011: 2 tubes, 892 012: 6 tubes)

Concentration

0.5 mg / mL

Form

Liquid solution (solvent: PBS(-))

Product Information

iMatrix-511 is recombinant human Laminin511-E8 fragments expressed by CHO-S cell (Life Technologies).

Storage and Stability

The liquid solution is stable at +2 to +15 °C until the expiration date printed on the label.

Protect from light.

iMatrix-511 is stable at 4 °C

for 2 years from the manufacturing date.

Activity

The dissociation constant of the binding activity with integrin α6β1 is under 10 nM.

Application

iMatrix-511 is able to use as cell culture substrate for various cell types including ES/iPS cells.

Procedure

1) Dilute the solution with sterile PBS(-). Coat dishes with 0.5 µg/cm².

* For example, for one well of a 6-well plate (9.6 cm² /well), add 9.6 µL of iMatrix-511 (4.8 µg) in 1.99 mL of PBS(-).

Add 2 mL of diluted iMatrix-511 solution to the well.

2) Incubate for 1 h at 37 °C, 3 h at room temperature, or over night at 4 °C.

3) Remove remaining fluid from the coated surface. No rinse is needed.

4) Immediately plate the cells at desired density.

* Don't allow the plate to dry.

* Briefly spin down all liquid in the tube before use.

* Avoid repeated freeze-thaw cycles.

References

- Ido H et al. *J Biol Chem.* **282** (15): 11144-54, 2007
- Taniguchi Y et al. *J Biol Chem.* **284** (12): 7820-31, 2009
- Miyazaki T et al. *Nat Commun.* **3**: 1236, 2012
- Nakagawa M et al. *Sci Rep.* **4**: 3594, 2014
- Doi D et al. *Stem Cell Reports.* **2**(3): 337-50, 2014
- Takashima Y et al. *Cell.* **158** (6): 1254-69, 2014
- Fukuta M et al. *PLoS One.* **9** (12): e112291, 2014
- Burridge PW et al. *Nat Methods.* **11** (8): 855-60, 2014
- Okumura N et al. *Invest Ophthalmol Vis Sci.* **56** (5): 2933-42, 2015
- Sasaki K et al. *Cell Stem Cell.* **17** (2): 178-94, 2015
- Samata B et al. *Nat Commun.* **7**: 13097, 2016
- Hayashi R et al. *Nature.* **531** (7594): 376-80, 2016
- Matsuno K et al. *Differentiation.* **92** (5): 281-90, 2016
- Nishimura K et al. *Stem Cell Reports.* **6** (4): 511-24, 2016
- Takayama K et al. *Biochem Biophys Res Commun.* **474** (1): 91-96, 2016
- Ishikawa T et al. *Hum Mol Genet.* **25** (23): 5188-5197, 2016
- Goparaju SK et al. *Sci Rep.* **7**:42367, 2017
- Miyazaki T et al. *Sci Rep.* **7**: 41165, 2017
- Hayashi R et al. *Nat Protoc.* **12** (4): 683-96, 2017
- Kikuchi T et al. *J Neurosci Res.* **95** (9):1829-37, 2017
- Musah S et al. *Nat Biomed Eng.* **1**: 0069, 2017
- Camp JG et al. *Nature.* **546** (7659): 533-38, 2017

Regulatory Disclaimer

For life science research only. Not for use in diagnostic procedures.

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