

# iMatrix-511 silk

Version 001

Store at 2-15°C

Protect from light

Product No. AMS.892 021 1,050 µg

## Background Information

Laminin-511 is well known to bind to the integrin  $\alpha 6 \beta 1$  which is located on the cell surface. iMatrix-511 is recombinant Laminin511-E8 fragments.

## Content

Recombinant Human Laminin511-E8 Fragments

## Amount

175 µg / tube (6 tubes)

## Concentration

0.5 mg / mL

## Form

Liquid solution (solvent: PBS(-))

## Product Information

iMatrix-511 is recombinant human Laminin511-E8 fragments expressed by Transgenic silkworm cocoon (Immuno-Biological Laboratories Co., Ltd.).

## 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  $\alpha 6 \beta 1$  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/cm<sup>2</sup>.

\* For example, for one well of a 6-well plate (9.6 cm<sup>2</sup> /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**: 855-60, 2014

Okumura N et al. *Invest Ophthalmol Vis Sci.* **56** (5), 2933-42, 2015

Sasaki K et al. *Nature* **531**, 367-80, 2016

Matsuno K et al. *Differentiation* 2016.04.002

Nishimura K et al. *Stem Cell Reports* **6** (4) 511–524, 2016

Takayama K et al. *Biochemical and Biophysical Research Communications* **474** (1): 91-96, 2016

## Regulatory Disclaimer

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

Developed and Manufactured by

Nippi, Incorporated

1-1-1 Senjumidori-cho, Adachi-ku, Tokyo 120-8601, Japan