

# Technical Data Sheet

## BG iMatrix-511 Silk

Catalog Number: RL511S

Source: *Transgenic Silkworm Cocoon*

### Description

BG iMatrix 511 Silk is a chemically defined, animal-free, and xeno-free laminin-511 E8 fragment. Laminin-511 is well known to bind to integrin  $\alpha 6 \beta 1$ , which is located on the cell surface and acts as a substrate for stem cell culture media for various cell types including ESCs and iPSCs. Recombinant laminin-511 E8 fragments are truncated, functional forms of laminin composed of the C-terminal regions of the alpha, beta, and gamma chains. Laminin-511 E8 (150 kDa) retains the full capability for binding to alpha 6 beta 1 integrin.

### Concentration

0.5mg/mL in PBS(-).

### Bioactivity

The dissociation constant of the binding activity with integrin  $\alpha 6 \beta 1$  is under 10nM.

### Pre-Coated Procedure

1. Dilute the solution with sterile PBS(-). Coat dishes with 0.5 ug/cm<sup>2</sup>. For example, for one well of a 6-well plate (9.6cm<sup>2</sup>/well) add 9.6 uL (4.8ug) of iMatrix-511 in 1.99 mL of PBS(-) and add 2mL of diluted iMatrix-511 solution to the well.
2. Incubate for 1 h at 37°C, 3 h at room temperature, or overnight at 4°C.
3. Remove remaining fluid from the coated surface. No rinse is needed.
4. Immediately plate the cells at the desired density.

Note: Don't allow the plate to dry. Briefly spin down all liquid in the tube before use. Avoid repeated freeze-thaw cycles.

### Pre-mix Procedure

1. Add and mix iMatrix-511 solution to the cell suspension at passaging (Recommended concentration: 0.25ug/cm<sup>2</sup>)
2. Plate the mixture of cell and iMatrix-511 solution at 1.0 to 2.0 x 10<sup>4</sup> cells/cm<sup>2</sup>.

### Storage

4°C. Protect from Light.

### References

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