

# Laminin 521

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Research-Grade  
& Preclinical-Grade



# KACTUS has successfully developed a high-quality recombinant Laminin 521 that can be applied to scientific research (research-grade) and preclinical development (preclinical-grade).

Laminin 521 is a matrix adhesion protein that is a natural component of the stem cell niche in vivo and is prominently expressed in embryonic and glomerular basement membranes. It is also involved in the regulation of important physiological processes such as cell adhesion, migration, differentiation, phenotype maintenance, and matrix-mediated signal transduction.

It can effectively support the normal growth and passage of pluripotent stem cells, maintain their stemness, and ensure the homogeneous growth of cells with genetic stability. Laminin 521 can be applied to the cultivation of stem cells and other primary cells and the development of related stem cell products.

## Features

- High purity ( $\geq 95\%$ )
- Low internal toxicity ( $< 10\text{EU/mg}$ )
- Applicable to a wide range of cells, from human iPSCs and MSCs to most anchorage-dependent progenitor cell types
- Compatible with a variety of feeder-free stem cell culture media on the market
- Can maintain the homogeneous growth and karyotype stability of stem cells

## Applications

- Stem cell culture including iPSCs, hESCs, MSCs, etc.
- Directed differentiation of stem cells
- Organoid culture including formation of organoids
- Growth of differentiation primary cells such as cardiomyocytes, endothelial cells, islet cells, etc.
- Drug development such as pulmonary hemorrhage autoantibodies

Day 2

Day 5



*Figure 1. iPSCs cultured over 5 days using KACTUS Laminin 521 show proliferation and normal phenotype.*

Catalog Number	Product Description	Grade
LMN-HM521	Human Laminin 521 RG	Research-Grade
LMN-HM522	Human Laminin 521 PG	Preclinical-Grade

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