

Product Details

Laminin-221 (LM221) takes multiple roles as a scaffold to store cells, growth factors and cytokines and is the most likely expressed cardiac laminin that maintains physiological activities of myocytes. Laminin 221-E8 consists of the C-terminal end of the alpha 2, beta 2, and gamma 1 chains. Previous study has confirmed that the laminin-221 heterotrimer ($\alpha 2\beta 2\gamma 1$) could bind integrin $\alpha 7X1$ and $\alpha 7X2$. Latest research indicated that the administration of LM221 enhanced accumulation of smooth muscle actin (SMA) and isolectin B4 (ILB4) double-positive cells to the damaged area and contributed to the improvement of cardiac function.

Key parameter

Purity (SDS PAGE)	> 90%
Mycoplasma Test	Negative
Sterility Test	Negative
Endotoxin Test	< 0.01 EU per μ g

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Formulation

Lyophilized from 0.22 μ m filtered solution in 51 mM Tris,100 mM Glycine,25 mM Arginine,150 mM NaCl,pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Storage

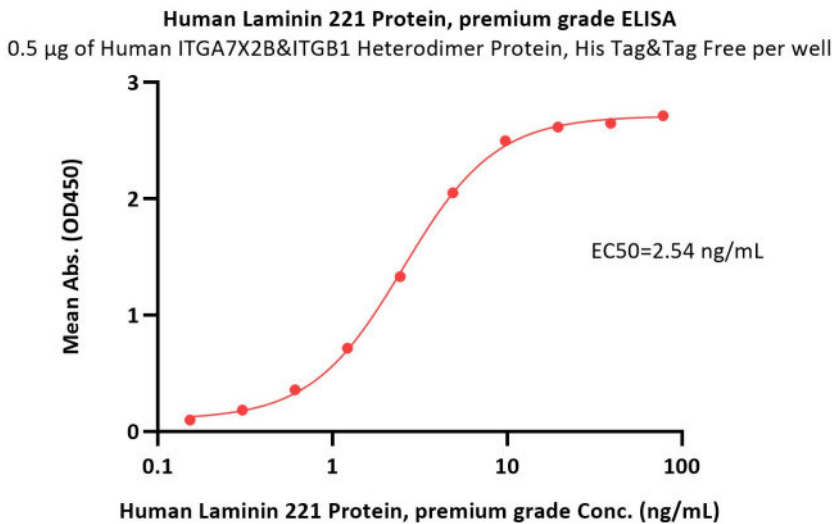
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

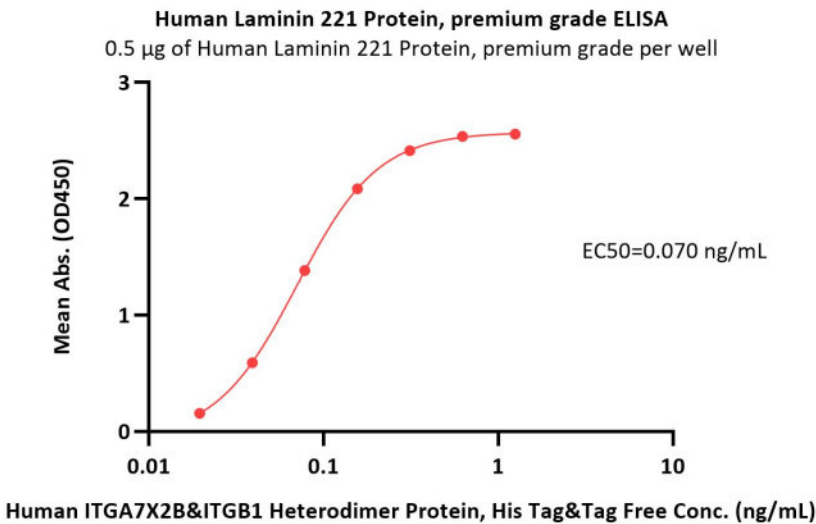
This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

Bioactivity-ELISA



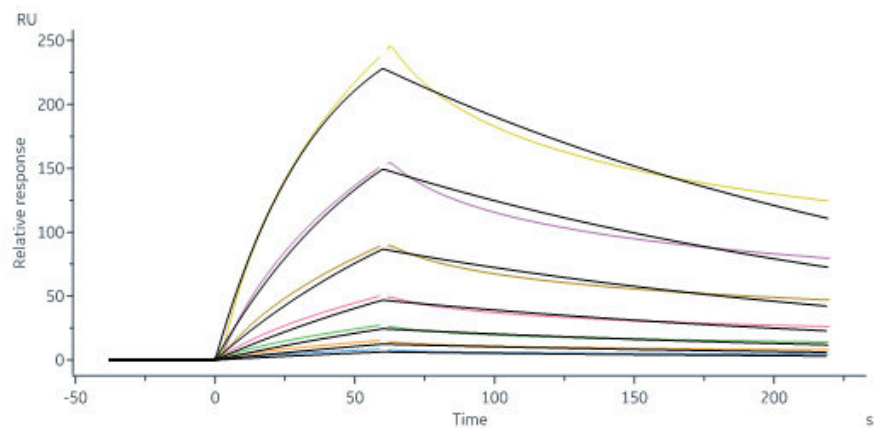
Immobilized Human ITGA7X2B&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-H52W8) at 5 μ g/mL (100 μ L/well) can bind Human Laminin 221 Protein, premium grade (Cat. No. LA2-H5269) with a linear range of 0.2-20 ng/mL (QC tested).



Immobilized Human Laminin 221 Protein, premium grade (Cat. No. LA2-H5269) at 5 μ g/mL (100 μ L/well) can bind Human ITGA7X2B&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-H52W8) with a linear range of 0.02-0.313 μ g/mL (Routinely tested).

Bioactivity-SPR





Human ITGA7X2B&ITGB1 Heterodimer Protein, His Tag&Tag Free (Cat. No. IT1-H52W8) immobilized on CM5 Chip can bind Human Laminin 221 Protein, premium grade (Cat. No. LA2-H5269) with an affinity constant of 49.8 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Clinical and Translational Updates

