Recombinant Human Laminin521 E8 Protein

Catalog No.: RP0048

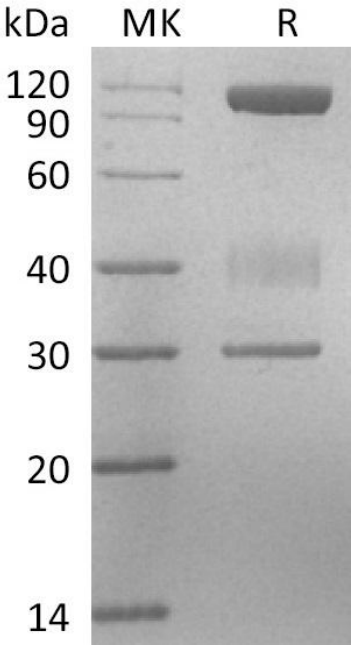
Basic Information

Information	
Source	*Human Cells*
Description	Recombinant Human Laminin521 is produced by our Mammalian expression system and the target gene encoding Ala2534-Ala3322&Leu1573-Gln1798&Asn1364-Pro1609 is expressed with a His, Flag and HA tag at N terminus respectively.
Accession	O15230&P55268&P11047
Known As	Laminin 521; LN521
Predicted Mol Mass	86.7&25.8&28.5 KDa
Apparent Mol Mass	(28-32)&(38-48)&(100-120) KDa, reducing conditions

Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

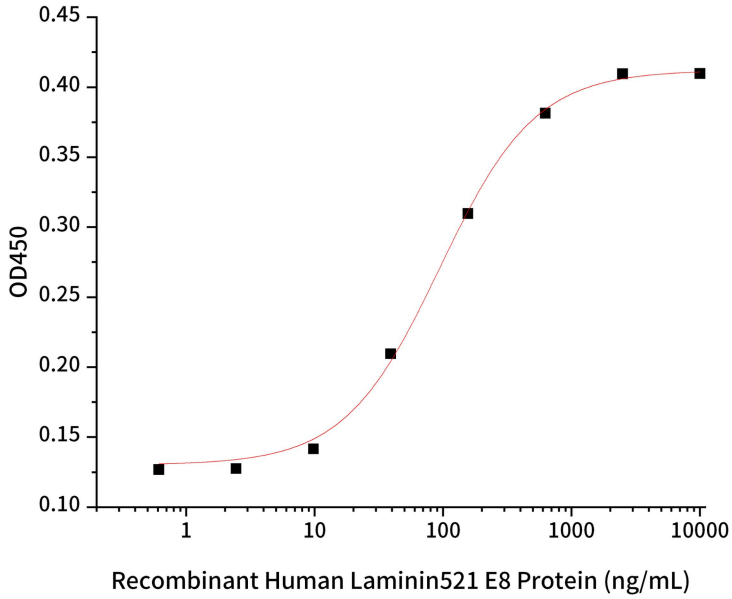
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE.

Bioactivity-Cell Based Assay



Measured by the ability of the immobilized protein to support the adhesion of H9 Human embryonic stem cells. The ED50 for this effect is 82.37 ng/mL(Regularly tested).

Background

Laminins are large molecular weight glycoproteins constituted by the assembly of three disulfide-linked polypeptides, the α, β and γ chains. The human genome encodes 11 genetically distinct laminin chains. Structurally, laminin chains differ by the number, size and organization of a few constitutive domains, endowing the various members of the laminin family with common and unique important functions. In particular, laminins are indispensable building blocks for cellular networks physically bridging the intracellular and extracellular compartments and relaying signals critical for cellular behavior, and for extracellular polymers determining the architecture and the physiology of basement membranes. Laminins are glycoproteins with both common and specific functions. One common and most important function of laminins is to interact with receptors anchored in the plasma membrane of cells adjacent to basement membranes. In doing so laminins regulate multiple cellular activities and signaling pathways. There are more than 50 theoretically possible heterotrimeric associations between all the a, β and c chains. laminins 511 and 521, are the most ubiquitous isoforms in the adult organism.