

Synonym

A2MR, APOER, APR, CD91, IGFBP-3R, IGFBP3R, IGFBP3R1, KPA, LRP, LRP1A, TGFBR5

Source

Human cluster III Protein, Fc Tag(LR1-H5255) is expressed from human 293 cells (HEK293). It contains AA Ser 2522 - Ile 2941 (Accession # [Q07954-1](#)). Predicted N-terminus: Ser 2522

Molecular Characterization

LRP-1(Ser 2522 - Ile 2941) Q07954-1	Fc(Pro 100 - Lys 330) P01857
--	---------------------------------

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 72.6 kDa. The protein migrates as 80-100 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

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.

Storage

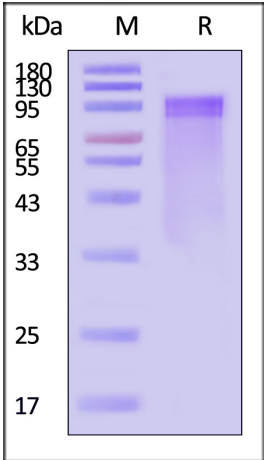
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

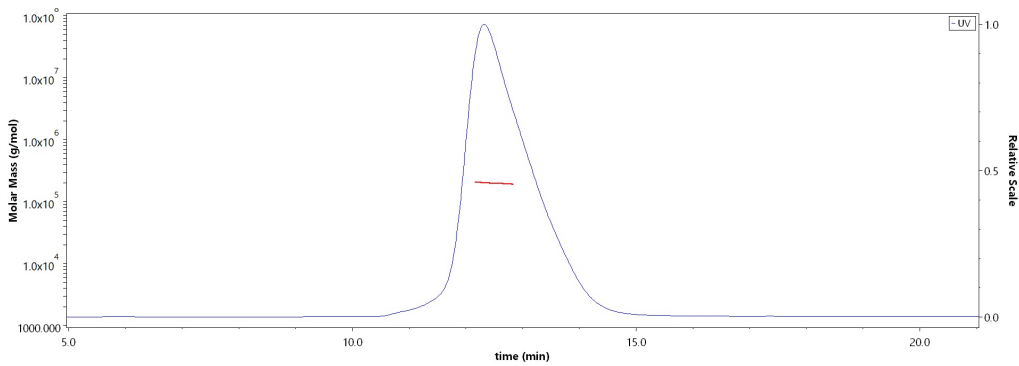
SDS-PAGE



Human cluster III Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-BLI

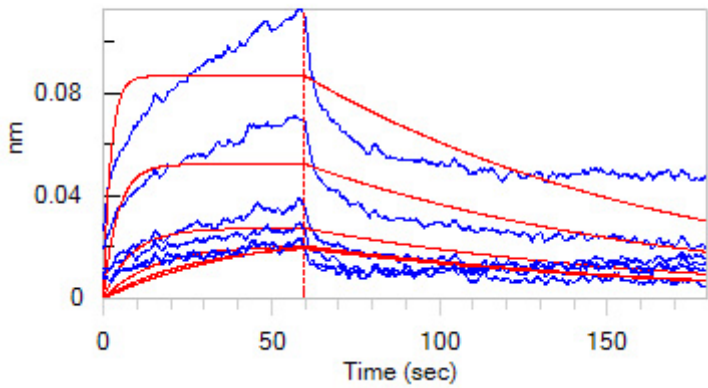
SEC-MALS



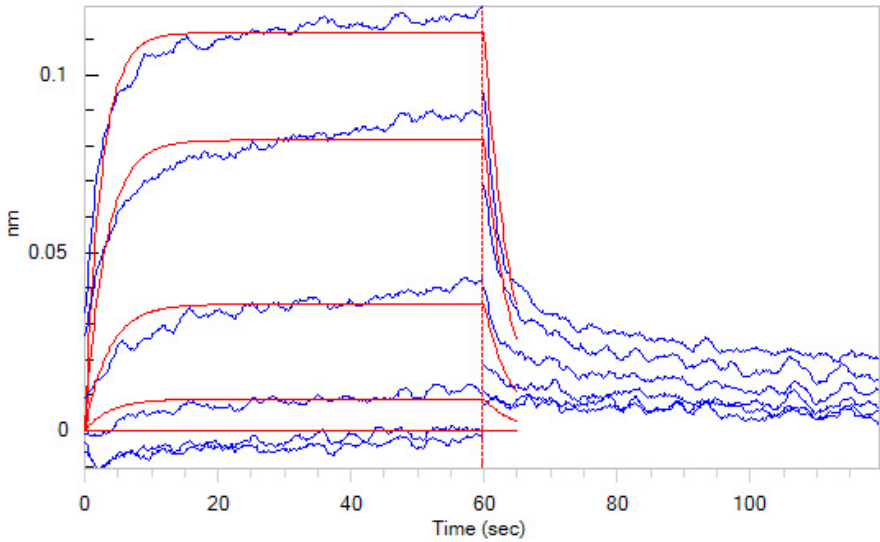
The purity of Human cluster III Protein, Fc Tag (Cat. No. LR1-H5255) is more than 90% and the molecular weight of this protein is around 185-215 kDa verified by SEC-MALS.

[Report](#)





Loaded Unconjugated Human PDGF-BB, His,Avitag (Cat. No. PDB-H5127) on NTA Biosensor, can bind Human cluster III Protein, Fc Tag (Cat. No. LR1-H5255) with an affinity constant of 20 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Human cluster III Protein, Fc Tag (Cat. No. LR1-H5255) on Protein A Biosensor, can bind Human APOE3, His Tag (Cat. No. APE-H5246) with an affinity constant of 8.7 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Low density lipoprotein receptor-related protein 1 (LRP1), also known as alpha-2-macroglobulin receptor (A2MR), apolipoprotein E receptor (APOER) or cluster of differentiation 91 (CD91), is a protein forming a receptor found in the plasma membrane of cells. The encoded preproprotein is proteolytically processed by furin to generate 515 kDa and 85 kDa subunits that form the mature receptor. LRP1 is also a key signalling protein and, thus, involved in various biological processes, such as lipoprotein metabolism and cell motility, and diseases, such as neurodegenerative diseases, atherosclerosis, and cancer.

