

Synonym

LRP-6,LRP6

Source

Biotinylated Human LRP-6, His, Avitag(LR6-H82E7) is expressed from human 293 cells (HEK293). It contains AA Ala 20 - Pro 630 (Accession # O75581-1). Predicted N-terminus: Ala 20

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 72.5 kDa. The protein migrates as 80-100 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ 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

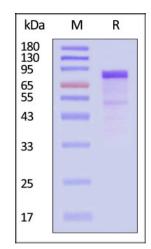
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

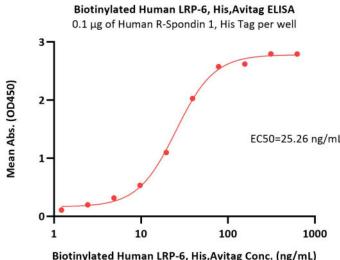


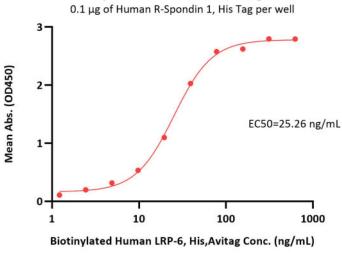
Biotinylated Human LRP-6, His, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

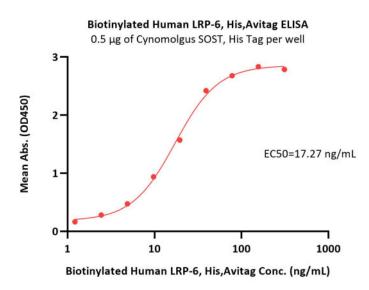








Immobilized Human R-Spondin 1, His Tag (Cat. No. RS1-H4221) at 1 μg/mL (100 µL/well) can bind Biotinylated Human LRP-6, His, Avitag (Cat. No. LR6-H82E7) with a linear range of 1-39 ng/mL (QC tested).



Immobilized Cynomolgus SOST, His Tag at 5 µg/mL (100 µL/well) can bind Biotinylated Human LRP-6, His, Avitag (Cat. No. LR6-H82E7) with a linear range of 1-39 ng/mL (Routinely tested).

Background

LRP6 is a transmembrane low-density lipoprotein receptor that shares a similar structure with LRP5. Low-density lipoprotein receptor-related protein 6 is a key component of the LRP5/LRP6/Frizzled co-receptor group that is involved in canonical Wnt pathway. The Wnt-induced Fzd/LRP6 coreceptor complex recruits DVL1 polymers to the plasma membrane which, in turn, recruits the AXIN1/GSK3B-complex to the cell surface promoting the formation of signalsomes and inhibiting AXIN1/GSK3-mediated phosphorylation and destruction of beta-catenin.

Clinical and Translational Updates

