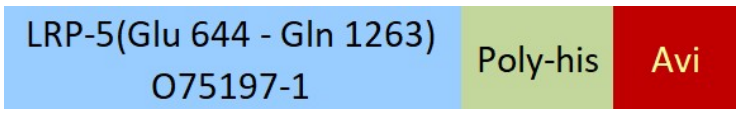
Synonym

LRP5,LRP-5,LRP-7,LRP7,LR3

Source

Biotinylated Human LRP-5, His,Avitag(LR5-H82E6) is expressed from human 293 cells (HEK293). It contains AA Glu 644 - Gln 1263 (Accession # O75197-1).
Predicted N-terminus: Glu 644

Molecular Characterization



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

The protein has a calculated MW of 73.3 kDa. The protein migrates as 70-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ 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

>95% as determined by SDS-PAGE.

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

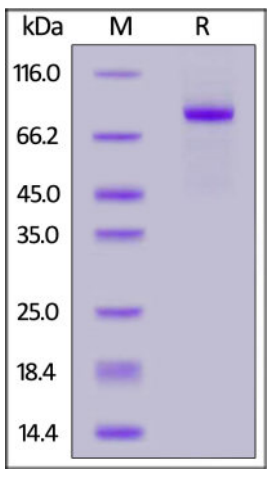
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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



Biotinylated Human LRP-5, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Low-density lipoprotein receptor-related protein 5(LRP-5) is also known as BMND1, EVR1, EVR4, HBM, LR3, LRP7, OPPG, OPTA1, VBCH2, LDL receptor related protein 5 and PCLD4. LRP5 is a transmembrane low-density lipoprotein receptor that shares a similar structure with LRP6. LRP5 acts as a co-receptor with

LRP6 and the Frizzled protein family members for transducing signals by Wnt proteins through the canonical Wnt pathway. This protein plays a key role in skeletal homeostasis. Mutations in LRP5 can lead to considerable changes in bone mass. A loss-of-function mutation causes osteoporosis-pseudoglioma (decrease in bone mass), while a gain-of-function mutation causes drastic increases in bone mass.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.