

Synonym

LRP10,MSTP087,SP220,UNQ389,PRO724

Source

Human LRP-10, Fc Tag (LR0-H5259) is expressed from human 293 cells (HEK293). It contains AA His 17 - Lys 440 (Accession # AAI13715).

Predicted N-terminus: His 17

Molecular Characterization

LRP-10(His 17 - Lys 440) AAI13715	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 72.7 kDa. The protein migrates as 95 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.

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.

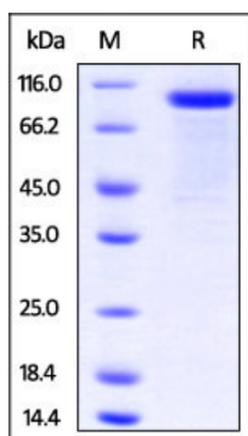
Storage

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

Please avoid repeated freeze-thaw cycles.

No activity loss was observed 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 LRP-10, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Background

Low-density lipoprotein receptor-related protein 10 (LRP10), a member of the LDLR family, is a single-pass type I membrane protein, which contains two CUB domains and four LDL-receptor class A domains. As a probable receptor, LRP10 is involved in the internalization of lipophilic molecules or signal transduction. LRP10 may be involved in the uptake of lipoprotein APOE in liver. Furthermore, Deletion of the extracellular domain of LRP10 negated its inhibitory effect. It suggested that LRP10 may interfere with the formation of the beta-catenin/TCF complex and its binding to target DNA in the nucleus, and that the extracellular domain of LRP10 is critical for inhibition of the canonical Wnt/beta-catenin signaling pathway. LRP10 has been improved to play a significant role in the brain physiology other than lipoprotein metabolism.

References

- (1) [Sugiyama T., et al., 1999, Biochemistry 39:15817-15825.](#)
- (2) [Daub H., et al., 2007, Mol. Cell 31:438-448.](#)
- (3) [Olsen J.V., et al., 2009, Sci. Signal. 3:RA3-RA3.](#)

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