

Human LRP1 / A2MR / CD91 Protein (aa 786-1165)

Catalog Number: 11665-HCCH



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

A2MR; APOER; APR; CD91; IGFBP3R; LRP; LRP1A; TGFBR5; A2mr; AI316852; b2b1554Clo; CD91; Lrp

Protein Construction:

The amino acid sequence (Arg 786-Leu 1165) of human LRP1 (NP_002323.2) corresponding to the cluster II LDLR domain was expressed and purified, with an additional peptide (ALEVLFG) at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 70 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu 27

Molecular Mass:

The recombinant human LRP1 (aa 786-1165) consists of 387 amino acids and predicts a molecular mass of 42 kDa. As a result of glycosylation, the apparent molecular mass of the protein is approximately 90-120 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

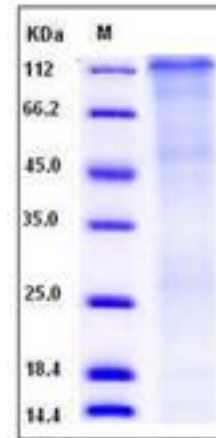
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 an endocytic receptor involved in several cellular processes. LRP1 / CD91 is a member of the cluster of differentiation (CD) system. The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. LRP1 / CD91 is involved in endocytosis and in phagocytosis of apoptotic cells and is required for early embryonic development. LRP1 / CD91 is also Involved in cellular lipid homeostasis, the plasma clearance of chylomicron remnants, activated LRPAP1 (alpha 2-macroglobulin), and the local metabolism of complexes between plasminogen activators and their endogenous inhibitors. LRP1 / CD91 May modulate cellular events, such as APP metabolism kinase-dependent intracellular signaling, neuronal calcium signaling as well as neurotransmission need the involvement of LRP1 / CD91.

References

- 1.Su HP, *et al.* (2002) Interaction of CED-6 / GULP, an adapter protein involved in engulfment of apoptotic cells with CED-1 and CD91 / low density lipoprotein receptor-related protein (LRP). *J Biol Chem.* 277(14): 11772-9.
- 2.Chen JS, *et al.* (2010) Secreted heat shock protein 90alpha induces colorectal cancer cell invasion through CD91 / LRP-1 and NF-kappaB-mediated integrin alphaV expression. *J Biol Chem.* 285(33): 25458-66.
- 3.Dasgupta S, *et al.* (2008) Factor VIII bypasses CD91 / LRP for endocytosis by dendritic cells leading to T-cell activation. *Haematologica.* 93(1): 83-9.

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