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LRPAP1
Recombinant Human Alpha-2-MRAP / LRPAP1 (His Tag)

Catalog No.	CRH617A-His CRH617B-His	**Quantity:**	50 µg 100 µg

Alternate Names: Alpha-2-macroglobulin receptor-associated protein, Alpha-2-MRAP, Low density lipoprotein receptor-related protein-associated protein 1, RAP

Description: Alpha-2-macroglobulin receptor-associated protein (LRPAP1) is a 39 kDa protein and a member of the alpha-2-MRAP family. It is a receptor antagonist that interacts with several members of the low density lipoprotein (LDL) receptor gene family. Upon binding to these receptors, LRPAP1 inhibits all ligand interactions with the receptors. LRPAP1 is present on cell surface forming a complex with the alpha-2-macroglobulin receptor heavy and light chains. It binds with LRP1B and the binding is followed by internalization and degradation. LRPAP1 interacts with LRP1/alpha-2-macroglobulin receptor and LRP2 (previously called glycoprotein 33), and may be involved in the pathogenesis of membrane glomerular nephritis. LRPAP1 together with LRP2 forms the Heymann nephritis antigenic complex. LRP2 is expressed in epithelial cells of the thyroid, where it can serve as a receptor for the protein thyroglobulin. The LRPAP1 insertion/deletion polymorphism influences cholesterol homeostasis and may confer risk for gallstone disease and gallbladder carcinoma (GBC) incidence usually parallels with the prevalence of cholelithiosis. The genetic variations at the LRPAP1 locus may modulate Alzheimer disease (AD) phenotype beyond risk for disease. In addition, the variation at the LRPAP1 gene could contribute to the risk of developing an early episode of myocardial infarction.

UniProt ID: P30533

Accession Number: NP_002328.1

Protein Construction: A DNA sequence encoding the human LRPAP1 (Tyr 35-Leu 357) was expressed, fused with a signal peptide at the N-terminus and a polyhistidine tag at the C-terminus.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The secreted rhLRPAP1 consists of 334 amino acids with a predicted MW of 39.2 kDa. As a result of glycosylation, rh LRPAP1 migrates at ~43 kDa in SDS-PAGE under reducing conditions.

Purity: > 92 % as determined by SDS-PAGE.

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

Biological Activity: Measured by its binding ability in a functional ELISA . Immobilized human LRPAP1 at 0.5 µg/ml can bind human VLDLR with a range of 3.2-400 ng/ml.

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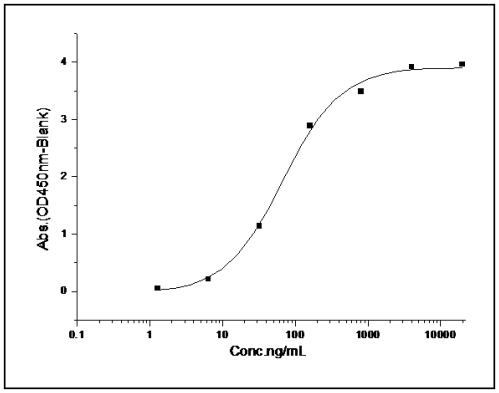
Predicted N-terminal: Tyr 35

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

Measured by its binding ability in a functional ELISA. Immobilized human LRPAP1 at 0.5 µg/ml can bind human VLDLR with a range of 3.2-400 ng/ml.



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