

Recombinant Human LDLR Protein (His Tag)

Catalog Number: PKSH031740

Note: Centrifuge before opening to ensure complete recovery of vial contents.

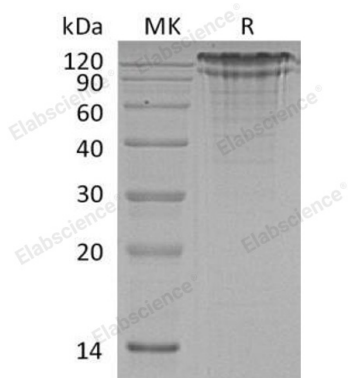
Description

Species	Human
Source	HEK293 Cells-derived Human LDLR protein Met 1-Arg 788, with an C-terminal His
Calculated MW	86.0 kDa
Accession	NP_000518.1
Bio-activity	1. Immobilized human PCSK9 at 10 µg/ml (100 µl/well) can bind biotinylated recombinant human LDLR. The EC ₅₀ of biotinylated human LDLR is 0.61 µg/ml. 2. Immobilized mouse PCSK9 at 10 µg/ml (100 µl/well) can bind biotinylated recombinant human LDLR. The EC ₅₀ of biotinylated human LDLR is 0.12 µg/ml.

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

LDL Receptor, also known as LDLR, is a mosaic protein which belongs to the Low density lipoprotein receptor gene family. The low density lipoprotein receptor (LDLR) gene family consists of cell surface proteins involved in receptor-mediated endocytosis of specific ligands. LDL Receptor consists of 840 amino acids (after removal of signal peptide) and mediates the endocytosis of cholesterol-rich LDL. Low density lipoprotein (LDL) is normally bound at the cell membrane and taken into the cell ending up in lysosomes where the protein is degraded and the cholesterol is made available for repression of microsomal enzyme 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase, the rate-limiting step in cholesterol synthesis. At the same time, a reciprocal stimulation of cholesterol ester synthesis takes place. LDL Receptor is a cell-surface receptor that recognizes the apoprotein B100 which is embedded in the phospholipid outer layer of LDL particles. The receptor also recognizes the apoE protein found in chylomicron remnants and VLDL remnants