Recombinant Human LDLR Protein (His Tag/AVI)

Catalog Number: PKSH032711

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

Description	
Species	Human
Source	HEK293 Cells-derived Human LDLR protein Ala22-Arg788, with an C-terminal Avi &
	His
Calculated MW	88.4 kDa
Observed MW	95-140 kDa
Accession	P01130
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % 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 -8
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 50mM HEPES, 150mM NaCl, 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	
	KDa MK R
	120
	90 60
	40
	30
	20
	14

> 95 % as determined by reducing SDS-PAGE.

Background

Low-density lipoprotein receptor 9 (LDL receptor) is a single-pass type I membrane protein which belongs to the LDLR family. It contains 3 EGF-like domains, 7 LDL-receptor class A domains, and 6 LDL-receptor class B repeats. This protein binds LDL, the major cholesterol-carrying lipoprotein of plasma, and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. In case of HIV-1 infection, it functions as a receptor for extracellular Tat in neurons, mediating its internalization in uninfected cells. Defects in LDLR will result in familial hypercholesterolemia.