Data Sheet (Cat.No.TMPJ-00394)

TargetMol

LDLR Protein, Human, Recombinant (Avi & His), Biotinylated

General Information

Synonyms:	Low-Density Lipoprotein Receptor;LDL Receptor;LDLR
Protein Construction:	Ala22-Arg788
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P01130
Molecular Weight:	95-140 KDa (reducing condition)
AA Sequence:	Ala22-Arg788

QC Testing

Biological Activity:	Loaded Biotinylated Human LDL R-Avi-His on SA Biosensor, can bind Mouse PCSK9-His with an affinity constant of 4.97 nM as determined in BLI assay. (Regularly tested)
Purity:	Greater than 95% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 50 mM HEPES, 150 mM NaCl, pH 7.4.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein 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.