

Recombinant Protein Technical Manual Recombinant Human LDLR Protein (His Tag)

RPES4265

Product Data:

Product SKU: RPES4265 **Size:** 10μg

Species: Human Cells

Uniprot: NP_000518.1

Protein Information:

Molecular Mass: 84.8 kDa

AP Molecular Mass: 9935 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: 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 a 0.2 µm filtered solution of 50mM HEPES, 150mM NaCl, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Low-Density Lipoprotein Receptor; LDL Receptor; LDLR;FH;FHC;LDL R;LDL

Receptor;LDLCQ2

Immunogen Information:

Sequence: Ala22-Arg788

Background:

Low-Density Lipoprotein Receptor (LDLR) is a transmembrane glycoprotein that plays a critical role in cholesterol homeostasis. LDLR mediates blood cholesterol level by interacting with lipoprotein particles like LDL and VLDL. The extracellular domain of LDLR contains LDL receptor type A (ligand-binding) modules (LA repeats), epidermal growth factor-like modules, and LY repeats containing the YWTD consensus motif that are important in binding and releasing of ApoB00 and ApoE in lipoprotein particles. The C terminal domain of LDLR inside the cell is required for the receptor internalization. Loss of function mutations in the LDLR gene causes Familial Hypercholesterolemia (FH).