

LDLR Protein, Human (HEK293, His)

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| Cat. No.: | HY-P70235 |
| Synonyms: | rHuLow-density lipoprotein receptor/LDLR, His; Low-Density Lipoprotein Receptor; LDL Receptor; LDLR |
| Species: | Human |
| Source: | HEK293 |
| Accession: | P01130 (A22-R788) |
| Gene ID: | 3949 |
| Molecular Weight: | 99-135 kDa |

PROPERTIES

AA Sequence

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|----------------|---------------|---------------|------------|
| AVGDR CERNE | FQCQDGK C I S | YKWVCDG S A E | CQDGSDESQE |
| TCLSVTCKSG | DFSCGGRVNR | CIPQFWRCDG | QVDCDNGSDE |
| QGCPPKTC SQ | DEFRCHDGKC | ISRQFVCDSD | RDCLDGSDEA |
| SCPVLTCGPA | SFQCNSSTCI | PQLWACDNDP | DCEDGSDEWP |
| QRCRGLYVFQ | GDS SPCSAFE | FHCLSGECIH | SSWRCDGGPD |
| CKDKSDEENC | AVATCRPDEF | QCS DGNC I HG | SRQCDREYDC |
| KDMSDEVGCV | NVTLCCEGPNK | FKCHSGECIT | LDKVCNMARD |
| CRDWSDEPIK | ECGTNECLDN | NGGCSHVCND | LKIGYECLCP |
| DGFQLVAQRR | CED IDECQDP | DTCSQLCVNL | EGGYKQCCEE |
| GFQLDPHTKA | CKAVGSIAYL | FFTNRHEVRK | MTLDRSEYTS |
| LIPNLRNVVA | LDTEVASNRI | YWSDLSQRM I | CSTQLDRAHG |
| VSSYD TV I SR | DIQAPDGLAV | DWIHSNIYWT | DSVLGTVSVA |
| DTKGVKRKTL | FRENGSKPRA | IVVDPVHGFM | YWTDWGTPAK |
| IKKGG L NGVD | IYSLVTENIQ | WPNGITLDDL | SGRLYWVDSK |
| LHSISSIDVN | GGNRKTILED | EKRLAHPFSL | AVFEDKVFWT |
| DIINEAIFSA | NRLTGSDVNL | LAENLLSPED | MVLFHNLTPQ |
| RGVNW CERTT | LSNGGCQYLC | LPAPQINPHS | PKFTCACPDG |
| MLLARDMRSC | LTEAEAAVAT | QETSTVRLKV | SSTAVRTQHT |
| TTRPV P D T SR | LPGATPGLTT | VEIVTMSHQA | LGDVAGRGNE |
| KKPSSVR | | | |

Biological Activity

Immobilized Human PCSK9 at 2 µg/mL (100 µL/well) can bind Biotinylated Human LDLR. The ED₅₀ for this effect is 278.5 ng/mL, corresponding to a specific activity is 3580.66 Unit/mg.

Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.2 µm filtered solution of 20 mM HEPES, 150 mM NaCl, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. For long term storage it is

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| | recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose). |
| Storage & Stability | Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage. |
| Shipping | Room temperature in continental US; may vary elsewhere. |

DESCRIPTION

Background

The LDLR Protein serves as a crucial mediator in cholesterol homeostasis by binding to low-density lipoprotein (LDL), the primary cholesterol-carrying lipoprotein in plasma, and facilitating its cellular uptake through endocytosis. To enable internalization, receptor-ligand complexes must first cluster into clathrin-coated pits. Additionally, in the context of microbial infection, LDLR acts as a receptor for the hepatitis C virus within hepatocytes, although this interaction does not occur through a direct binding with viral proteins. This dual functionality underscores the diverse roles of LDLR in both cholesterol metabolism and the cellular response to viral infections.

Caution: Product has not been fully validated for medical applications. For research use only.

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