

## VLDL Receptor/VLDLR Active Protein | VLDLR active protein

VLDL Receptor/VLDLR Protein, Human, Recombinant (His Tag)

CATALOG #  
**AAA257962**

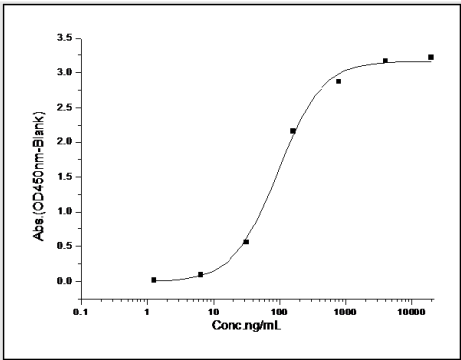
HOST  
**HEK293 Cells**

### PRODUCT SYNONYMS

VLDL Receptor/VLDLR; VLDL Receptor/VLDLR Protein; Human; Recombinant (His Tag); Human VLDLR/VLDL Receptor Protein (His Tag); CAMRQ1 Protein; CARMQ1 Protein; CHRMQ1 Protein; VLDLRCH Protein; very low density lipoprotein receptor; VLDLR active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293 Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Purity/Purification     | >80% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Form/Format             | Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.                                                                                                                                                                                                                                                                                    |
| Sequence                | Met1-Ser79 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Species                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Endotoxin               | <1.0EU per ug of the protein as determined by the LAL method                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Predicted N Terminal    | Gly 28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Tag                     | C-His                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Protein Construction    | A DNA sequence encoding the human VLDLR isoform alpha (NP_003374.3) extracellular domain (Met 1-Ser 797) was fused with a polyhistidine tag at the C-terminus.                                                                                                                                                                                                                                                                                                                                        |
| Reconstitution          | A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.                                                                                                                                                                                                                                                                                                                                                                       |
| Activity                | 1.Measured by its binding ability in a functional ELISA.2.Immobilized human VLDLR-His at 10ug/mL (100uL/well) can bind biotinylated human LRPAP1-His. The EC50 of biotinylated human LRPAP1-His is 0.05-0.2ug/mL.                                                                                                                                                                                                                                                                                     |
| Preparation and Storage | Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.<br>In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice. |



SDS-PAGE

**Application Data**  
Measured by its binding ability in a functional ELISA. Immobilized human VLDLR-His at 10ug/mL (100uL/well) can bind biotinylated human LRPAP1-His, the EC50 of biotinylated human LRPAP1-His is 0.05-0.2 ug/mL.

ADDITIONAL INFORMATION

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for VLDLR active protein | Background: The very low density lipoprotein receptor, known as VLDLR, is a single-pass type 1 integral membrane protein and a member of the LDL receptor family. This receptor family includes LDL receptor, LRP, megalin, VLDLR and ApoER2, and is characterized by a cluster of cysteine-rich class A repeats, epidermal growth factor (EGF)-like repeats, YWTD repeats and an O-linked sugar sdomain. VLDLR contains 3 EGF-like domains, 8 LDL-receptor class A domains, as well as 6 LDL-receptor class B repeats, and is abundant in heart, skeletal muscle, also ovary and kidney, but not in liver. VLDLR binds VLDL and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. VLDLR mediates the phosphorylation of mDab1 (mammalian disabled protein) via binding to Reelin, and induces the modulation of Tau phosphorylation. This pathway regulates the migration of neurons along with the radial glial fiber network during brain development. Defects of VLDLR may be the cause of VLDLR-associated cerebellar hypoplasia (VLDLRCH), a syndrome characterized by moderate-to-profound mental retardation, delayed ambulation, and predominantly truncal ataxia. |
| References                                           | Trommsdorff, M. et al., 1999. Cell. 97: 689-701. Mikhailenko, I. et al., 1999. J. Cell Sci. 112: 3269-3281. Sato, A. et al., 1999. Biochem. J. 341: 377-383. Hiesberger, T. et al., 1999. Neuron 24: 481-489. Tiebel, O. et al., 1999. Atherosclerosis 145: 239-251. Boycott, K.M. et al., 2005, Am. J. Hum. Genet. 77 (3): 477-483. Moheb, L.A. et al., 2008, Eur. J. Hum. Genet. 16 (2): 270-273.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

NCBI AND UNIPROT INFORMATION

|                                  |                                                              |
|----------------------------------|--------------------------------------------------------------|
| NCBI GI #                        | 65301167                                                     |
| NCBI GeneID                      | 7436                                                         |
| NCBI Accession #                 | NP_003374.3                                                  |
| NCBI GenBank Nucleotide #        | NM_003383.3                                                  |
| UniProt Accession #              | P98155; Q5VVF6; B2RMZ7; D3DRH6                               |
| Molecular Weight                 | 96,098 Da                                                    |
| NCBI Official Full Name          | very low-density lipoprotein receptor isoform a              |
| NCBI Official Synonym Full Names | very low density lipoprotein receptor                        |
| NCBI Official Symbol             | VLDLR                                                        |
| NCBI Official Synonym Symbols    | CARMQ1; CHRMQ1; VLDLRCH                                      |
| NCBI Protein Information         | very low-density lipoprotein receptor; VLDL-R; VLDL receptor |
| UniProt Protein Name             | Very low-density lipoprotein receptor                        |

|                            |                       |
|----------------------------|-----------------------|
| UniProt Gene Name          | VLDLR                 |
| UniProt Synonym Gene Names | VLDL receptor; VLDL-R |
| UniProt Entry Name         | VLDLR_HUMAN           |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-active-protein/vldl-receptor-vldlr/257962>