

Human CellExp VLDLR, human recombinant protein
VLDLR, CARMQ1, CHRMQ1, FLJ35024, VLDLRCH, VLDL-R, very-low-density-lipoprotein receptor
Catalog # PBV11085r

Specification

Human CellExp VLDLR, human recombinant protein - Product info

Primary Accession
Calculated MW

[P98155](#)

This protein comprises 781 amino acids with polyhistidine tag at C-terminus and has a calculated MW of 86 kDa. The predicted N-terminus is Gly 28. DTT-reduced protein migrates as 150 & 180 kDa polypeptide in SDS-PAGE due to different glycosylation. KDa

Human CellExp VLDLR, human recombinant protein - Additional Info

Gene ID
Gene Symbol
Other Names

7436
VLDLR

VLDLR, CARMQ1, CHRMQ1, FLJ35024, VLDLRCH, VLDL-R, very-low-density-lipoprotein receptor

Gene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Results

Human
HEK293 cells
SDS-PAGE; ≥97%
N/A;
Yes
Measured by its binding ability in a functional ELISA. When Recombinant Human Apolipoprotein E3 is immobilized at 1 µg/ml (100 µl/well), the concentration of Recombinant Human VLDLR that produces 50% of the optimal binding response is found to be approximately 0.03 - 0.15 µg/ml.

Target/Specificity
VLDLR

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

Format
Lyophilized

Storage

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp VLDLR, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Human CellExp VLDLR, human recombinant protein - Images

Human CellExp VLDLR, human recombinant protein - Background

The very-low-density-lipoprotein receptor (VLDL-R) is a lipoprotein receptor that shows considerable similarity to the low density-lipoprotein receptor. VLDL R is a 130 kDa type I transmembrane protein in the LDL receptor family that plays a significant role in lipid metabolism and in nervous system development and function. This receptor has been suggested to be important for the metabolism of apoprotein-E-containing triacylglycerol-rich lipoproteins, such as very-low-density lipoprotein (VLDL), beta-migrating VLDL and intermediate-density lipoprotein. It is also one of the receptors of reelin, an extracellular matrix protein which regulates the processes of neuronal migration and synaptic plasticity. In humans, the VLDL-R is encoded by the VLDLR gene. A rare neurological disorder first described in the 1970s under the name "disequilibrium syndrome" is now considered to be caused by the disruption of VLDLR gene. The disorder was renamed VLDLR-associated cerebellar hypoplasia (VLDLRCH) after a 2005 study. It is associated with parental consanguinity and found in secluded communities such as the Hutterites. VLDLRCH is one of the two known genetic disorders caused by a disruption of reelin signaling pathway, along with Norman-Roberts syndrome.

Human CellExp VLDLR, human recombinant protein - References

Gafvels M.E., et al. Somat. Cell Mol. Genet. 19:557-569(1993).
Webb J.C., et al. Hum. Mol. Genet. 3:531-537(1994).
Sakai J., et al. J. Biol. Chem. 269:2173-2182(1994).
Oka K., et al. Genomics 20:298-300(1994).
Humphray S.J., et al. Nature 429:369-374(2004).