

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 <u>P98155</u>

Calculated MW

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 7436
Gene Symbol VLDLR

Other Names

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

Gene Source

Source

Assay&Purity

Human

HEK293 cells

SDS-PAGE; ≥97%

Assay2&Purity2 N/A;
Recombinant Yes

Results Measured by its binding ability in a

functional ELISA. When Recombinant Human Apolipoprotein E3 is immobilized at 1 μ g/ml (100 μ l/well), the concentration of Recombinant Human VLDLR that produces 50% of the optimal binding response is found to be approximately 0.03 - 0.15

μq/ml.

Target/Specificity

VLDLR

Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 μ g/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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- 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).