

VLDLR Blocking Peptide (C-Term)

Synthetic peptide Catalog # BP21837b

Specification

VLDLR Blocking Peptide (C-Term) - Product Information

Primary Accession

P98155

VLDLR Blocking Peptide (C-Term) - Additional Information

Gene ID 7436

Other Names

Very low-density lipoprotein receptor, VLDL receptor, VLDL-R, VLDLR

Target/Specificity

The synthetic peptide sequence is selected from aa 628-642 of HUMAN VLDLR

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VLDLR Blocking Peptide (C-Term) - Protein Information

Name VLDLR

Function

Multifunctional cell surface receptor that binds VLDL and transports it into cells by endocytosis and therefore plays an important role in energy metabolism. Also binds to a wide range of other molecules including Reelin/RELN or apolipoprotein E/APOE- containing ligands as well as clusterin/CLU (PubMed:24381170, PubMed:30873003). In the off-state of the pathway, forms homooligomers or heterooligomers with LRP8 (PubMed:30873003). Upon binding to ligands, homooligomers are rearranged to higher order receptor clusters that transmit the extracellular RELN signal to intracellular signaling processes by binding to DAB1 (PubMed:30873003). This interaction results in phosphorylation of DAB1 leading to the ultimate cell responses required for the correct positioning of newly generated neurons. Later, mediates a stop signal for migrating neurons, preventing them from entering the marginal zone (By similarity).



Cellular Location

Cell membrane; Single-pass type I membrane protein Membrane, clathrin-coated pit; Single-pass type I membrane protein

Tissue Location

Abundant in heart and skeletal muscle; also ovary and kidney; not in liver

VLDLR Blocking Peptide (C-Term) - Protocols

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

• Blocking Peptides

VLDLR Blocking Peptide (C-Term) - Images

VLDLR Blocking Peptide (C-Term) - Background

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. Binding to Reelin induces tyrosine phosphorylation of Dab1 and modulation of Tau phosphorylation (By similarity).

VLDLR Blocking Peptide (C-Term) - 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).