

Anti-VLDL-Receptor Antibody

Mouse Monoclonal Antibody Catalog # AH13570

Specification

Anti-VLDL-Receptor Antibody - Product Information

Application WB, IHC-P, IF, FC Primary Accession P98155

Other Accession
Other Accession
Reactivity
Human, Rat
Host
Clonality
Host
Monoclonal
Isotype
Mouse / IgG1

Calculated MW 96098

Anti-VLDL-Receptor Antibody - Additional Information

Gene ID 7436

Other Names

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

Application Note

WB~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>FC~~1:10~50

Format

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

Anti-VLDL-Receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-VLDL-Receptor Antibody - 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:<a href="http://www.uniprot.org/citations/30873003"





target="_blank">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

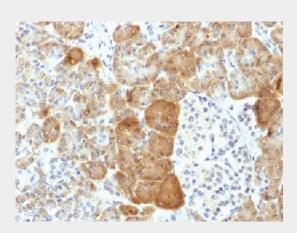
Abundant in heart and skeletal muscle; also ovary and kidney; not in liver

Anti-VLDL-Receptor Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

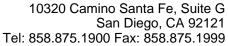
Anti-VLDL-Receptor Antibody - Images



Formalin-fixed, paraffin-embedded human Pancreas stained with VLDL-Receptor Monoclonal Antibody (VLDLR/1337).

Anti-VLDL-Receptor Antibody - Background

VLDLR (very low density lipoprotein receptor) is a member of the LDL receptor gene family, which includes LDL receptor, LRP, megalin, VLDLR and ApoER2. The LDL receptor family is characterized by a cluster of cysteine-rich class A repeats, epidermal growth factor (EGF)-like repeats, YWTD repeats and an O-linked sugar domain. VLDLR associates with RAP (receptor associated protein) during receptor folding, and RAP facilitates the secretion of the extracellular region of VLDLR.





VLDLR is thought to mediate the interaction of extracellular Reelin and cytosolic mDab1 (mammalian disabled protein), which activates a tyrosine kinase. This pathway regulates the migration of neurons along the radial glial fiber network during brain development.