

VLDLR Antibody (clone 1H10) Mouse Monoclonal Antibody Catalog # ALS14939

Specification

VLDLR Antibody (clone 1H10) - Product Information

Application	IHC
Primary Accession	<u>P98155</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	96kDa KDa

VLDLR Antibody (clone 1H10) - Additional Information

Gene ID 7436

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

Target/Specificity Binds to an epitope on the C-terminus of the ligand binding domain (aa191-355) of VLDL receptor and blocks apoE4 binding.

Reconstitution & Storage Long term: -70°C; Short term: -70°C

Precautions VLDLR Antibody (clone 1H10) is for research use only and not for use in diagnostic or therapeutic procedures.

VLDLR Antibody (clone 1H10) - 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. Binds also 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

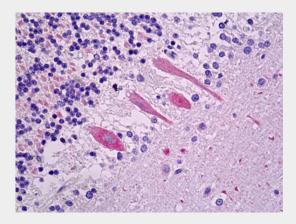
Abundant in heart and skeletal muscle; also ovary and kidney; not in liver

VLDLR Antibody (clone 1H10) - Protocols

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

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

VLDLR Antibody (clone 1H10) - Images



Anti-VLDLR antibody IHC of human brain, cerebellum, Purkinje.

VLDLR Antibody (clone 1H10) - 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 Antibody (clone 1H10) - 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).