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VLDLR Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5754c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P98155
Other Accession	P35953, NP_003374.3
Reactivity	Human, Rat, Mouse
Predicted	Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21297
Calculated MW	96098
Antigen Region	484-510

Additional Information

Gene ID	7436
Other Names	Very low-density lipoprotein receptor, VLDL receptor, VLDL-R, VLDLR
Target/Specificity	This VLDLR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 484-510 amino acids from the Central region of human VLDLR.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	VLDLR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

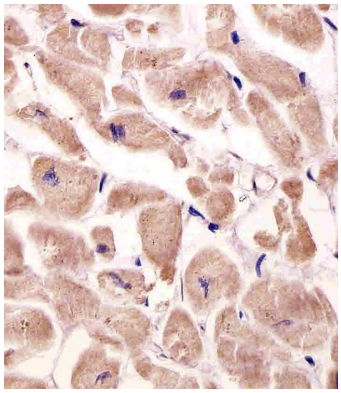
Background

The low density lipoprotein receptor (LDLR) gene family consists of cell surface proteins involved in receptor-mediated endocytosis of specific ligands. This gene encodes a lipoprotein receptor that is a member of the LDLR family and plays important roles in VLDL-triglyceride metabolism and the reelin signaling pathway. Mutations in this gene cause VLDLR-associated cerebellar hypoplasia. Alternative splicing generates multiple transcript variants encoding distinct isoforms for this gene. [provided by RefSeq].

References

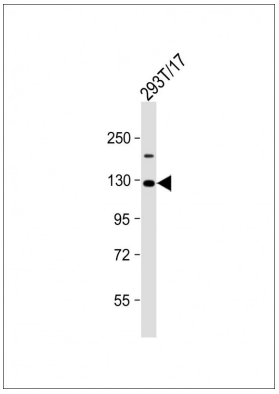
Sakai, K., et al. Brain Res. 1276, 11-21 (2009)
Francis, P.J., et al. J. Med. Genet. 46(5):300-307(2009)
Ananyeva, N.M., et al. Blood Coagul. Fibrinolysis 19(6):543-555(2008)
Turkmen, S., et al. Eur. J. Hum. Genet. 16(9):1070-1074(2008)

Images



AP5754c staining VLDLR in human heart tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Anti-VLDLR Antibody (Center) at 1:2000 dilution + 293T/17 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 96 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Citations

- Human extravillous trophoblasts bind but do not internalize antiphospholipid antibodies.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.