

VLDLR (m): 293T Lysate: sc-124572

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 is expressed in brain, heart, skeletal muscle and adipose tissue. It 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.

REFERENCES

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2. Mikhailenko, I., et al. 1999. Functional domains of the very low density lipoprotein receptor: molecular analysis of ligand binding and acid-dependent ligand dissociation mechanisms. *J. Cell Sci.* 112: 3269-3281.
3. Tiebel, O., et al. 1999. Mouse very low density lipoprotein receptor (VLDLR): gene structure, tissue-specific expression and dietary and development regulation. *Atherosclerosis* 145: 239-251.
4. Savonen, R., et al. 1999. The carboxyl-terminal domain of receptor-associated protein facilitates proper folding and trafficking of the very low density lipoprotein receptor by interaction with the three amino-terminal ligand-binding repeats of the receptor. *J. Biol. Chem.* 274: 25877-25882.
5. Sato, A., et al. 1999. 39 kDa receptor-associated protein (RAP) facilitates secretion and ligand binding of extracellular region of very low density lipoprotein receptor: implication for a distinct pathway from low density lipoprotein receptor. *Biochem. J.* 341: 377-383.
6. D'Arcangelo, G., et al. 1999. Reelin is a ligand for lipoprotein receptors. *Neuron* 24: 471-479.
7. Hiesberger, T., et al. 1999. Direct binding of Reelin to VLDL receptor and ApoE receptor 2 induces tyrosine phosphorylation of disabled-1 and modulates its phosphorylation. *Neuron* 24: 481-489.

CHROMOSOMAL LOCATION

Genetic locus: Vldlr (mouse) mapping to 19 C1.

PRODUCT

VLDLR (m): 293T Lysate represents a lysate of mouse VLDLR transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

VLDLR (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive VLDLR antibodies. Recommended use: 10-20 µl per lane.

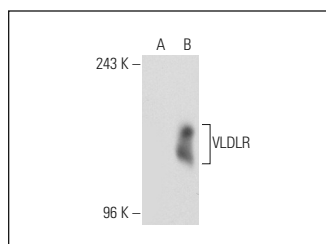
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VLDLR (6A6): sc-18824 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse VLDLR expression in VLDLR transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



VLDLR (6A6): sc-18824. Western blot analysis of VLDLR expression in non-transfected: sc-117752 (A) and mouse VLDLR transfected: sc-124572 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.