

VLDLR (H-95): sc-20745

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.

CHROMOSOMAL LOCATION

Genetic locus: VLDLR (human) mapping to 9p24.2; Vldlr (mouse) mapping to 19 C1.

SOURCE

VLDLR (H-95) is a rabbit polyclonal antibody raised against amino acids 736-830 of VLDLR of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

VLDLR (H-95) is recommended for detection of VLDLR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VLDLR (H-95) is also recommended for detection of VLDLR in additional species, including equine and bovine.

Suitable for use as control antibody for VLDLR siRNA (h): sc-36822, VLDLR siRNA (m): sc-36823, VLDLR shRNA Plasmid (h): sc-36822-SH, VLDLR shRNA Plasmid (m): sc-36823-SH, VLDLR shRNA (h) Lentiviral Particles: sc-36822-V and VLDLR shRNA (m) Lentiviral Particles: sc-36823-V.

Molecular Weight of fully processed, glycosylated VLDLR: 161 kDa.

Molecular Weight of unglycosylated VLDLR: 143 kDa.

Positive Controls: A-10 cell lysate: sc-3806 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Croucher, D., et al. 2006. The urokinase/PAI-2 complex a new high affinity ligand for the endocytosis receptor low density lipoprotein receptor-related protein. *J. Biol. Chem.* 281: 10206-10213.
2. Croucher, D.R., et al. 2007. A structural basis for differential cell signalling by PAI-1 and PAI-2 in breast cancer cells. *Biochem. J.* 408: 203-210.
3. Loewen, N., et al. 2009. Genomic response of hypoxic Müller cells involves the very low density lipoprotein receptor as part of an angiogenic network. *Exp. Eye Res.* 88: 928-937.
4. García-Miranda, P., et al. 2010. Rat small intestine expresses the Reelin-Disabled-1 signalling pathway. *Exp. Physiol.* 95: 498-507.

PROTOCOLS

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



Try **VLDLR (6A6): sc-18824** or **VLDLR (E-8): sc-390555**, our highly recommended monoclonal alternatives to VLDLR (H-95). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **VLDLR (6A6): sc-18824**.