SANTA CRUZ BIOTECHNOLOGY, INC.

VLDLR (E-8): sc-390555

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. Trommsdorff, M., et al. 1999. Reeler/disabled-like disruption of neuronal migration in knockout mice lacking the VLDL receptor and ApoE receptor 2. Cell 97: 689-701.
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.

CHROMOSOMAL LOCATION

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

SOURCE

VLDLR (E-8) is a mouse monoclonal antibody raised against amino acids 736-830 of VLDLR of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

VLDLR (E-8) is recommended for detection of VLDLR of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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.

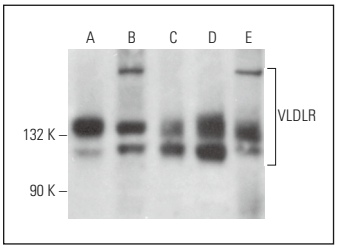
Molecular Weight of unglycosylated VLDLR: 143 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, 3T3-L1 cell lysate: sc-2243 or A-10 cell lysate: sc-3806.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



VLDLR (E-8): sc-390555. Western blot analysis of VLDLR expression in HeLa (**A**), A-10 (**B**), 3T3-L1 (**C**) and NIH/3T3 (**D**) whole cell lysates and rat tongue tissue extract (**E**).

SELECT PRODUCT CITATIONS

1. Yakovlev, S., et al. 2016. Anti-VLDL receptor monoclonal antibodies inhibit fibrin-VLDL receptor interaction and reduce fibrin-dependent leukocyte transmigration. Thromb. Haemost. 116: 1122-1130.
2. Ma, Y., et al. 2020. Enhancing effect of FSH on follicular development through yolk formation and deposition in the low-yield laying chickens. Theriogenology 157: 418-430.

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.

PROTOCOLS

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

CONJUGATES

See **VLDLR (6A6): sc-18824** for VLDLR antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.