**BACKGROUND**

LDLR (low density lipoprotein receptor) is a member of the LDL receptor gene family, which includes LDLR, 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. The LDL receptor is a cell surface transmembrane protein that mediates the uptake of low density lipoprotein and its degradation in the lysosome, which provides cholesterol to cells. The cytoplasmic domain of the LDL receptor is necessary for the receptor to cluster in coated pits, which promotes the rapid endocytosis of bound LDL. Mutations in LDLR cause the autosomal dominant disease familial hypercholesterolemia (FH), which promotes premature coronary atherosclerosis.

**CHROMOSOMAL LOCATION**

Genetic locus: LDLR (human) mapping to 19p13.2; Ldlr (mouse) mapping to 9 A3.

**SOURCE**

LDLR (C7) is a mouse monoclonal antibody raised against partially purified adrenal LDL receptor of bovine origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LDLR (C7) is available conjugated to agarose (sc-18823 AC), 500 µg/0.25 ml sodium azide and 0.1% gelatin.

Alexa Fluor® 680 (sc-18823 AF680), Alexa Fluor® 790 (sc-18823 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM; and to either Alexa Fluor® 594 (sc-18823 AF594), Alexa Fluor® 546 (sc-18823 AF546), Alexa Fluor® 488 (sc-18823 AF488), Alexa Fluor® 488 (sc-18823 FITC), Alexa Fluor® 488 (sc-18823 AF488), Alexa Fluor® 546 (sc-18823 AF546), Alexa Fluor® 594 (sc-18823 AF594) or Alexa Fluor® 647 (sc-18823 AF647), 200 µg/ml, for WB (RGB), IF, IHQ and FCM; and to either Alexa Fluor® 680 (sc-18823 AF680) or Alexa Fluor® 790 (sc-18823 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

LDLR (C7) is recommended for detection of LDLR 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

LDLR (C7) is also recommended for detection of LDLR in additional species, including bovine.

Suitable for use as control antibody for LDLR siRNA (h): sc-35802, LDLR siRNA (m): sc-35803, LDLR shRNA Plasmid (h): sc-35802-SH, LDLR shRNA Plasmid (m): sc-35803-SH, LDLR shRNA (h) Lentiviral Particles: sc-35802-V and LDLR shRNA (m) Lentiviral Particles: sc-35803-V.

Molecular Weight of LDLR: 160 Kda.

Positive Controls: human adrenal gland extract: sc-363761, CCD-1064S cell lysate: sc-2263 or Raji whole cell lysate: sc-364236.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


7. Le, O.T., et al. 2015. Plasma membrane tetraspanin CD81 complexes with proprotein convertase subtilisin/kexin type 9 (PCSK9) and low density lipoprotein receptor (LDLR), and its levels are reduced by PCSK9. J. Biol. Chem. 290: 23385-23400.


**RESEARCH USE**

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