

Rabbit Anti-LDL receptor Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52062

Product Information

ApplicationWB, ICC, EPrimary AccessionP01130

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 95376
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human LDL-R

Epitope Specificity 781-860/860

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane; Single-pass type I membrane protein. Endomembrane

system; Single-pass type I membrane protein. Membrane, clathrin-coated pit;

Single-pass type I membrane protein. Note=Found distributed from the

plasma membrane to intracellular compartments.

SIMILARITY Belongs to the LDLR family. Contains 3 EGF-like domains. Contains 7

LDL-receptor class A domains. Contains 6 LDL-receptor class B repeats.

Interacts with LDL RAP1. Interacts with SNX17. Interacts with HCV E1/E2

SUBUNIT Interacts with LDLRAP1. Interacts with SNX17. Interacts with HCV E1/E2

heterodimer. Interacts with HIV-1 Tat.

Post-translational modifications Important Note

N- and O-glycosylated. Ubiquitinated by MYLIP leading to degradation.

This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The low density lipoprotein receptor (LDLR) gene family consists of cell

surface proteins involved in receptor-mediated endocytosis of specific ligands. The encoded protein is normally bound at the cell membrane, where

it binds low density lipoprotein/cholesterol and is taken into the cell.

Lysosomes release the cholesterol, which is made available for repression of microsomal enzyme 3-hydroxy-3-methylglutaryl coenzyme A (HMG CoA) reductase, the rate-limiting step in cholesterol synthesis. At the same time, a reciprocal stimulation of cholesterol ester synthesis takes place. Mutations in

this gene cause the autosomal dominant disorder, familial

hypercholesterolemia. Alternate splicing results in multiple transcript

variants.[provided by RefSeq, May 2022]

Additional Information

Gene ID 3949

Other Names FH; FHC; LDLCQ2; Low-density lipoprotein receptor; LDL receptor; LDLR

Target/SpecificityBinds LDL, the major cholesterol-carrying lipoprotein of plasma, and

transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. In case of HIV-1 infection, functions as a receptor for extracellular Tat in neurons,

mediating its internalization in uninfected cells.

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name LDLR

Function Binds low density lipoprotein /LDL, the major cholesterol- carrying

lipoprotein of plasma, and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. Forms a ternary complex with PGRMC1 and TMEM97

receptors which increases LDLR-mediated LDL internalization

(PubMed: 30443021).

Cellular Location Cell membrane; Single-pass type I membrane protein

{ECO:0000250 | UniProtKB:P01131}. Membrane, clathrin-coated pit. Golgi apparatus. Early endosome. Late endosome. Lysosome Note=Rapidly endocytosed upon ligand binding. Localized at cell membrane, probably in

lipid rafts, in serum-starved conditions (PubMed:30443021).

Background

Binds LDL, the major cholesterol-carrying lipoprotein of plasma, and transports it into cells by endocytosis. In order to be internalized, the receptor-ligand complexes must first cluster into clathrin-coated pits. In case of HIV-1 infection, functions as a receptor for extracellular Tat in neurons, mediating its internalization in uninfected cells.

References

Yamamoto T., et al. Cell 39:27-38(1984).

Suedhof T.C., et al. Science 228:815-822(1985).

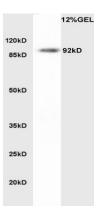
Jia S., et al. Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.

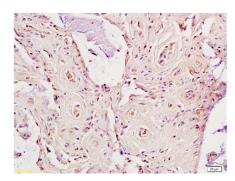
Ota T., et al. Nat. Genet. 36:40-45(2004).

Kalnine N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

Images

Human colon lysates probed with Anti LDL Receptor Polyclonal Antibody, Unconjugated (AP52062) at 1:200 overnight at 4°C. Followed by conjugation to secondary antibody at 1:3000 for 90 min at 37°C.





Formalin-fixed and paraffin embedded human rectal carcinoma labeled Anti-LDL receptor Polyclonal Antibody, Unconjugated (AP52062) at 1:200, followed by conjugation to the secondary antibody and DAB staining

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