

# Rabbit Anti-LDL receptor Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP52062

## Product Information

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<b>Application</b>	WB, ICC, E
<b>Primary Accession</b>	<a href="#">P01130</a>
<b>Reactivity</b>	Human, Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	95376
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human LDL-R
<b>Epitope Specificity</b>	781-860/860
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	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.
<b>SIMILARITY</b>	Belongs to the LDLR family. Contains 3 EGF-like domains. Contains 7 LDL-receptor class A domains. Contains 6 LDL-receptor class B repeats.
<b>SUBUNIT</b>	Interacts with LDLRAP1. Interacts with SNX17. Interacts with HCV E1/E2 heterodimer. Interacts with HIV-1 Tat.
<b>Post-translational modifications</b>	N- and O-glycosylated. Ubiquitinated by MYLIP leading to degradation.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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

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<b>Gene ID</b>	3949
<b>Other Names</b>	FH; FHC; LDLCQ2; Low-density lipoprotein receptor; LDL receptor; LDLR

<b>Target/Specificity</b>	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.
<b>Dilution</b>	WB=1:500-2000,ICC=1:100,Flow-Cyt=1 µg/Test,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glycerol
<b>Storage</b>	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

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<b>Name</b>	LDLR
<b>Function</b>	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: <a href="#">30443021</a> ).
<b>Cellular Location</b>	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

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## References

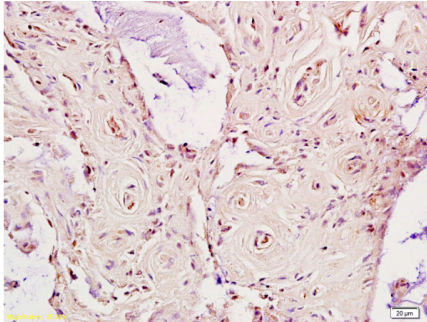
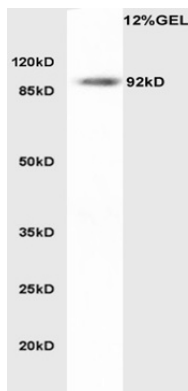
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Yamamoto T.,et al.Cell 39:27-38(1984).  
 Suedhof T.C.,et al.Science 228:815-822(1985).  
 Jia S.,et al.Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.  
 Ota T.,et al.Nat. Genet. 36:40-45(2004).  
 Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

## Images

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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'.