

LDLR Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2030a

Specification

LDLR Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** WB, IHC, FC, E P01130 Human Mouse Monoclonal IgG1 95.4kDa KDa

The low density lipoprotein receptor (LDLR) gene family consists of cell surface proteins involved in receptor-mediated endocytosis of specific ligands. Low density lipoprotein (LDL) is normally bound at the cell membrane and taken into the cell ending up in lysosomes where the protein is degraded and the cholesterol 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.r

Immunogen Purified recombinant fragment of human LDLR (AA: 22-150) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

LDLR Antibody - Additional Information

Gene ID 3949

Other Names Low-density lipoprotein receptor, LDL receptor, LDLR

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LDLR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



LDLR Antibody - 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).

LDLR Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>