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LDLR Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2034a

Product Information

Application	WB, FC, E
Primary Accession	P01130
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	7H5B11
Isotype	IgG1
Calculated MW	95376
Description	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.
Immunogen	Purified recombinant fragment of human LDLR (AA: 22-150) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	3949
Other Names	Low-density lipoprotein receptor, LDL receptor, LDLR
Dilution	WB~~1/500 - 1/2000 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.

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).

References

Phytother Res. 2012 Nov;26(11):1688-94.Biochim Biophys Acta. 2011 Jun;1811(6):397-408.

Images

