10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LDLR Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP8960c

Specification

LDLR Antibody (Center) Blocking Peptide - Product Information

Primary Accession P01130

LDLR Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3949

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8960c was selected from the Center region of human LDLR. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

LDLR Antibody (Center) Blocking Peptide - 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).

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LDLR Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

LDLR Antibody (Center) Blocking Peptide - Images

LDLR Antibody (Center) Blocking Peptide - Background

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.

LDLR Antibody (Center) Blocking Peptide - References

Hobbs,H.H., et.al., Hum. Mutat. 1 (6), 445-466 (1992)Brown,M.S. et.al., Proc. Natl. Acad. Sci. U.S.A. 76 (7), 3330-3337 (1979)