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ARH (LDLRAP1) Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP8013a

Specification

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q5SW96

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - Additional Information

Gene ID 26119

Other Names
Low density lipoprotein receptor adapter protein 1, Autosomal recessive hypercholesterolemia protein, LDLRAP1, ARH

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8013a was selected from the N-term region of human LDLRAP1. 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.

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - Protein Information

Name LDLRAP1 (HGNC:18640)

Function
Adapter protein (clathrin-associated sorting protein (CLASP)) required for efficient endocytosis of the LDL receptor (LDLR) in polarized cells such as hepatocytes and lymphocytes, but not in non-polarized cells (fibroblasts). May be required for LDL binding and internalization but not for receptor clustering in coated pits. May facilitate the endocytosis of LDLR and LDLR-LDL complexes from coated pits by stabilizing the interaction between the receptor and the structural components of the pits. May also be involved in the internalization of other LDLR family members. Binds to phosphoinositides, which regulate clathrin bud assembly at the cell surface. Required for trafficking of LRP2 to the endocytic recycling compartment which is necessary for LRP2 proteolysis, releasing a tail fragment which translocates to the nucleus and mediates transcriptional repression (By similarity).

Cellular Location
Cytoplasm.

Tissue Location
Expressed at high levels in the kidney, liver, and placenta, with lower levels detectable in brain, heart, muscle, colon, spleen, intestine, lung, and leukocytes

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - Images

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - Background

LDLRAP1 is a cytosolic protein which contains a phosphotyrosine binding (PTD) domain. The PTD domain has been found to interact with the cytoplasmic tail of the LDL receptor. This adapter protein is required for efficient endocytosis of the LDL receptor (LDLR) in polarized cells such as hepatocytes and lymphocytes, but not in non-polarized cells (fibroblasts). LDLRAP1 may be required for LDL binding and internalization but not for receptor clustering in coated pits. This protein may facilitate the endocytocis of LDLR and LDLR-LDL complexes from coated pits by stabilizing the interaction between the receptor and the structural components of the pits, and may also be involved in the internalization of other LDLR family members. Mutations in the LDLRAP1 gene lead to LDL receptor malfunction and cause the disorder autosomal recessive hypercholesterolaemia.

ARH (LDLRAP1) Antibody (N-term) Blocking peptide - References

Maurer,M.E., J. Cell. Sci. 119 (PT 20), 4235-4246 (2006)Keyel,P.A., Mol. Biol. Cell 17 (10), 4300-4317 (2006)