

ARH (LDLRAP1) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8013b

Specification

ARH (LDLRAP1) Antibody (C-term) - Product Information

Application Primary Accession	IHC-P, WB,E <u>05SW96</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33885
Antigen Region	277-306

ARH (LDLRAP1) Antibody (C-term) - Additional Information

Gene ID 26119

Other Names

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

Target/Specificity

This ARH (LDLRAP1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 277-306 amino acids from the C-terminal region of human ARH (LDLRAP1).

Dilution IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

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

Precautions

ARH (LDLRAP1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ARH (LDLRAP1) Antibody (C-term) - 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 (C-term) - Protocols

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

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

ARH (LDLRAP1) Antibody (C-term) - Images



Western blot analysis of LDLRAP1 Antibody (C-term) (Cat.#AP8013b) in NCI-H460 cell line lysates (35ug/lane). LDLRAP1 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with LDLRAP1 antibody (C-term)(Cat.#AP8013b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ARH (LDLRAP1) Antibody (C-term) - 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 (C-term) - References

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