

ARH / LDLRAP1 Antibody (clone 4G4-D5)

Mouse Monoclonal Antibody Catalog # ALS13485

Specification

ARH / LDLRAP1 Antibody (clone 4G4-D5) - Product Information

Application

Primary Accession

Reactivity

Host

Clonality

Calculated MW

WB, IF, IHC

O5SW96

Human

Mouse

Mouse

Monoclonal

34kDa KDa

ARH / LDLRAP1 Antibody (clone 4G4-D5) - Additional Information

Gene ID 26119

Other Names

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

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

ARH / LDLRAP1 Antibody (clone 4G4-D5) is for research use only and not for use in diagnostic or therapeutic procedures.

ARH / LDLRAP1 Antibody (clone 4G4-D5) - 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



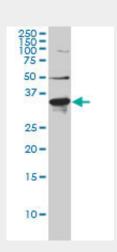
Expressed at high levels in the kidney, liver, and placenta, with lower levels detectable in brain, heart, muscle, colon, spleen, intestine, lung, and leukocytes

ARH / LDLRAP1 Antibody (clone 4G4-D5) - Protocols

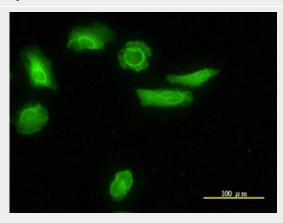
Provided below are standard protocols that you may find useful for product applications.

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

ARH / LDLRAP1 Antibody (clone 4G4-D5) - Images

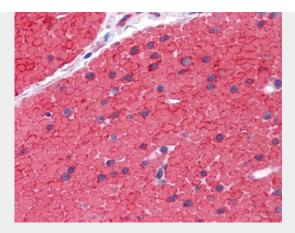


LDLRAP1 monoclonal antibody, clone 4G4-D5 Western blot of LDLRAP1 expression in HeLa NE.

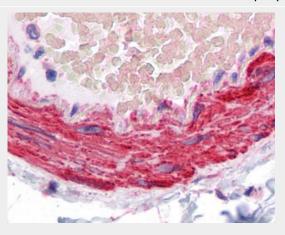


Immunofluorescence of monoclonal antibody to LDLRAP1 on HeLa cell (antibody concentration 10 ug/ml).

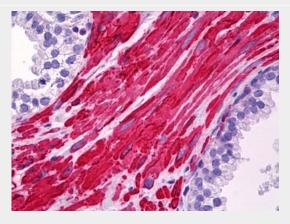




Anti-LDLRAP1 antibody IHC of human small intestine, muscularis propria.



Anti-LDLRAP1 antibody IHC of human vessel.



Anti-LDLRAP1 antibody IHC of human prostate, smooth muscle.

ARH / LDLRAP1 Antibody (clone 4G4-D5) - Background

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 endocytocis 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.

ARH / LDLRAP1 Antibody (clone 4G4-D5) - References





Garcia C.K., et al. Science 292:1394-1398(2001). Wilund K.R., et al. Hum. Mol. Genet. 11:3019-3030(2002). Bechtel S., et al. BMC Genomics 8:399-399(2007). Gregory S.G., et al. Nature 441:315-321(2006). He G., et al. J. Biol. Chem. 277:44044-44049(2002).