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Goat Anti-EHD2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1358a

Specification

Goat Anti-EHD2 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9NZN4
Other Accession	NP_055416, 30846
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**61161**

Goat Anti-EHD2 Antibody - Additional Information

Gene ID 30846

Other Names
EH domain-containing protein 2, PAST homolog 2, EHD2, PAST2

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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
Goat Anti-EHD2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-EHD2 Antibody - Protein Information

Name EHD2 (HGNC:3243)

Function
ATP- and membrane-binding protein that controls membrane reorganization/tubulation upon ATP hydrolysis (By similarity). Plays a role in membrane trafficking between the plasma membrane and endosomes (PubMed:17233914). Important for the internalization of GLUT4. Required for fusion of myoblasts to skeletal muscle myotubes. Required for normal translocation of FER1L5 to the plasma membrane (By similarity). Regulates the equilibrium between cell surface-associated and

cell surface-dissociated caveolae by constraining caveolae at the cell membrane (PubMed:25588833).

Cellular Location
Cell membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q8BH64}; Cytoplasmic side {ECO:0000250|UniProtKB:Q8BH64}. Membrane, caveola; Peripheral membrane protein {ECO:0000250|UniProtKB:Q8BH64}; Cytoplasmic side {ECO:0000250|UniProtKB:Q8BH64}. Endosome membrane {ECO:0000250|UniProtKB:Q4V8H8}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q4V8H8}; Cytoplasmic side {ECO:0000250|UniProtKB:Q4V8H8}. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q8BH64}. Note=Colocalizes with GLUT4 in intracellular tubulovesicular structures that are associated with cortical F-actin. Colocalizes with FER1L5 at plasma membrane in myoblasts and myotubes. {ECO:0000250|UniProtKB:Q8BH64}

Tissue Location
Highly expressed in heart and moderately expressed in placenta, lung, and skeletal muscle.

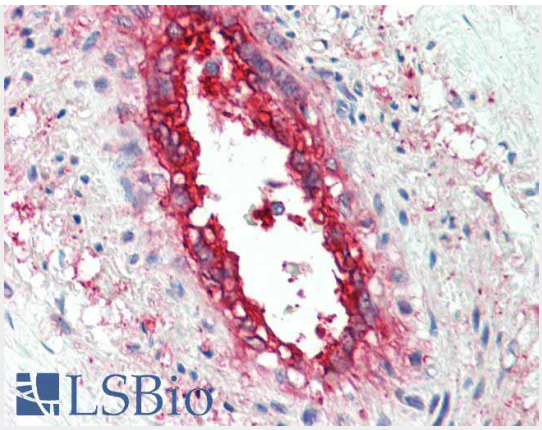
Goat Anti-EHD2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-EHD2 Antibody - Images

AF1358a (0.1 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1358a (5 µg/ml) staining of paraffin embedded Human Vessel. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-EHD2 Antibody - Background

This gene encodes a member of the EH domain-containing protein family. These proteins are characterized by a C-terminal EF-hand domain, a nucleotide-binding consensus site at the N terminus and a bipartite nuclear localization signal. The encoded protein interacts with the actin cytoskeleton through an N-terminal domain and also binds to an EH domain-binding protein through the C-terminal EH domain. This interaction appears to connect clathrin-dependent endocytosis to actin, suggesting that this gene product participates in the endocytic pathway.

Goat Anti-EHD2 Antibody - References

EH domain proteins regulate cardiac membrane protein targeting. Gudmundsson H, et al. Circ Res, 2010 Jul 9. PMID 20489164.
Architectural and mechanistic insights into an EHD ATPase involved in membrane remodelling. Daumke O, et al. Nature, 2007 Oct 3. PMID 17914359.
Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.
C-terminal EH-domain-containing proteins: consensus for a role in endocytic trafficking, EH? Naslavsky N, et al. J Cell Sci, 2005 Sep 15. PMID 16155252.
The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.