

EHD1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13814b

Product Information

Application WB, E
Primary Accession Q9H4M9

Other Accession <u>Q641Z6, Q9WVK4, Q5E9R3, NP 006786.2</u>

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB32073
Calculated MW 60627
Antigen Region 410-438

Additional Information

Gene ID 10938

Other Names EH domain-containing protein 1, PAST homolog 1, hPAST1, Testilin, EHD1,

PAST, PAST1

Target/Specificity This EHD1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 410-438 amino acids from the

C-terminal region of human EHD1.

Dilution 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 purified through a protein A column, followed by peptide

affinity purification.

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 EHD1 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name EHD1 (HGNC:3242)

Function ATP- and membrane-binding protein that controls membrane

reorganization/tubulation upon ATP hydrolysis. In vitro causes vesiculation of

endocytic membranes (PubMed:24019528). Acts in early endocytic membrane fusion and membrane trafficking of recycling endosomes (PubMed: 15020713, PubMed: 17233914, PubMed: 20801876). Recruited to endosomal membranes upon nerve growth factor stimulation, indirectly regulates neurite outgrowth (By similarity). Plays a role in myoblast fusion (By similarity). Involved in the unidirectional retrograde dendritic transport of endocytosed BACE1 and in efficient sorting of BACE1 to axons implicating a function in neuronal APP processing (By similarity). Plays a role in the formation of the ciliary vesicle (CV), an early step in cilium biogenesis (PubMed:31615969). Proposed to be required for the fusion of distal appendage vesicles (DAVs) to form the CV by recruiting SNARE complex component SNAP29. Is required for recruitment of transition zone proteins CEP290, RPGRIP1L, TMEM67 and B9D2, and of IFT20 following DAV reorganization before Rab8-dependent ciliary membrane extension. Required for the loss of CCP110 form the mother centriole essential for the maturation of the basal body during ciliogenesis (PubMed: 25686250).

Cellular Location

Recycling endosome membrane; Peripheral membrane protein; Cytoplasmic side. Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane {ECO:0000250|UniProtKB:Q9WVK4}; Peripheral membrane protein; Cytoplasmic side. Cell projection, cilium membrane; Peripheral membrane protein; Cytoplasmic side. Note=Preferentially associates with tubular recycling endosomes (PubMed:15020713, PubMed:17233914, PubMed:19864458, PubMed:23596323). Colocalizes with FER1L5 at plasma membrane in myoblasts and myotubes (By similarity). Localizes to the ciliary pocket from where the cilium protrudes (PubMed:25686250). Colocalizes with BACE1 in tubulovesicular cytoplasmic membranes. Colocalizes with BACE1 and APP amyloid beta proteins in hippocampal mossy fiber terminals (By similarity). {ECO:0000250|UniProtKB:Q9WVK4, ECO:0000269|PubMed:15020713, ECO:0000269|PubMed:17233914, ECO:0000269|PubMed:19864458, ECO:0000269|PubMed:23596323, ECO:0000269|PubMed:25686250}

Tissue Location

Highly expressed in testis.

Background

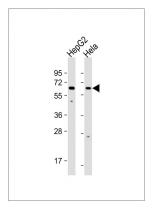
This gene belongs to a highly conserved gene family encoding EPS15 homology (EH) domain-containing proteins. The protein-binding EH domain was first noted in EPS15, a substrate for the epidermal growth factor receptor. The EH domain has been shown to be an important motif in proteins involved in protein-protein interactions and in intracellular sorting. The protein encoded by this gene is thought to play a role in the endocytosis of IGF1 receptors.

References

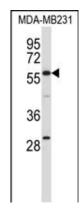
Gudmundsson, H., et al. Circ. Res. 107(1):84-95(2010) Sharma, M., et al. Mol. Biol. Cell 20(24):5181-5194(2009) Kieken, F., et al. Protein Sci. 18(12):2471-2479(2009) Jovic, M., et al. Mol. Biol. Cell 20(11):2731-2743(2009) Fichtman, B., et al. Cell. Mol. Biol. Lett. 13(4):632-648(2008)

Images

All lanes: Anti-EHD1 Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat



Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 61kDa Blocking/Dilution buffer: 5% NFDM/TBST.



EHD1 Antibody (C-term) (Cat. #AP13814b) western blot analysis in MDA-MB231 cell line lysates (35ug/lane). This demonstrates the EHD1 antibody detected the EHD1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.