

Goat anti-EHD1 Antibody

Peptide-affinity purified goat antibody Catalog # AF4535a

Product Information

Application	WB, IHC, IF, FC, Pep-ELISA
Primary Accession	<u>Q9H4M9</u>
Other Accession	<u>NP_001269373.1</u> , <u>NP_001269374.1</u>
Reactivity	Human, Mouse, Rat, Bovine
Host	Goat
Clonality	Polyclonal
Clone Names	EHD1
Calculated MW	60627

Additional Information

Gene ID	10938
Other Names	EHD1; PAST; PAST1; H-PAST; HPAST1; EH-domain containing 1; testilin; FLJ42622; FLJ44618; OTTHUMP00000069747
Dilution	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50 Pep-ELISA~~N/A
Format	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
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-EHD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EHD1 (<u>HGNC:3242</u>)
Function	ATP- and membrane-binding protein that controls membrane reorganization/tubulation upon ATP hydrolysis. In vitro causes vesiculation of endocytic membranes (PubMed: <u>24019528</u>). Acts in early endocytic membrane fusion and membrane trafficking of recycling endosomes (PubMed: <u>15020713</u> , PubMed: <u>17233914</u> , PubMed: <u>20801876</u>). 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: <u>31615969</u>). 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: <u>25686250</u>).
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.

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