Rabbit MYO6 Polyclonal Antibody | anti-MYO6 antibody

MYO6 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA328048	**Rabbit**	**Human, Mouse, Rat**	**ELISA, Immunohistochemistry, Western Blot**

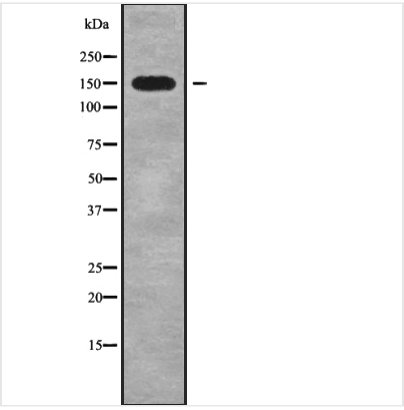
PRODUCT SYNONYMS

MYO6; Polyclonal Antibody; MYO6 Antibody; Deafness autosomal recessive 37; DFNA 22; DFNA22; DFNB 37; DFNB37; KIAA0389; MYO 6; Myo6; MYO6_HUMAN; Myosin VI; Myosin-VI; Myosin6; Unconventional myosin-6; Unconventional myosin-VI; anti-MYO6 antibody

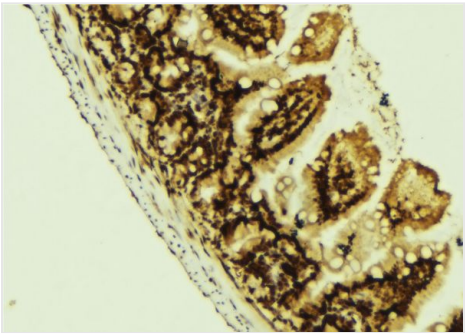
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MYO6 antibody detects endogenous levels of total MYO6
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1262
Applicable Applications for anti-MYO6 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MYO6
Subcellular Location	Cytoplasmic Vesicle > Clathrin-Coated Vesicle Membrane; Cytoplasmic Vesicle > Clathrin-Coated Vesicle Membrane. Cell Projection > Ruffle Membrane and Golgi Apparatus > Trans-Golgi Network Membrane. Golgi Apparatus. Nucleus. Cytoplasm > Perinuclear Region. Membrane > Clathrin-Coated Pit. Cell Projection > Ruffle Membrane. Also present in endocyctic vesicles, and membrane ruffles. Translocates from membrane ruffles, endocytic vesicles and cytoplasm to golgi apparatus, perinuclear membrane and nucleus through induction by p53 and p53-induced DNA damage. Recruited into membrane ruffles from cell surface by EGF-stimulation. Colocalizes with DAB2 in clathrin-coated pits/vesicles. Colocalizes with OPTN at the golgi complex and in vesicular structures close to the plasma membrane.
Tissue Specificity	Expressed in most tissues examined including heart, brain, placenta, pancreas, spleen, thymus, prostate, testis, ovary, small intestine and colon. Highest levels in brain, pancreas, testis and small intestine. Also expressed in fetal brain and cochlea. Isoform 1 and isoform 2, containing the small insert, and isoform 4, containing neither insert, are expressed in unpolarized epithelial cells.
Predicted Cross Reactivity	**Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken**
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of MYO6 using HeLa whole cell lysates



IHC (Immunohistochemistry)
AAA328048 at 1/100 staining Mouse colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-MYO6 antibody	Function: Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Myosin 6 is a reverse-direction motor protein that moves towards the minus-end of actin filaments. Has slow rate of actin-activated ADP release due to weak ATP binding. Functions in a variety of intracellular processes such as vesicular membrane trafficking and cell migration. Required for the structural integrity of the Golgi apparatus via the p53-dependent pro-survival pathway. Appears to be involved in a very early step of clathrin-mediated endocytosis in polarized epithelial cells. May act as a regulator of F-actin dynamics. May play a role in transporting DAB2 from the plasma membrane to specific cellular targets. Required for structural integrity of inner ear hair cells (By similarity). Subunit Structure: Homodimer; dimerization seems to implicate the unfolding of the three-helix bundle region creating an additional calmodulin binding site, and cargo binding (By similarity). Binding to calmodulin through a unique insert, not found in other myosins, located in the neck region between the motor domain and the IQ domain appears to contribute to the directionality reversal. This interaction occurs only if the C-terminal lobe of calmodulin is occupied by calcium. Interaction with F-actin/ACTN1 occurs only at the apical brush border domain of the proximal tubule cells (By similarity). Interacts with DAB2. In vitro, the C-terminal globular tail binds a C-terminal region of DAB2. Interacts with CFTR. Forms a complex with CFTR and DAB2 in the apical membrane of epithelial cells. Interacts with OPTN (By similarity). Post-translational Modifications: Phosphorylation in the motor domain, induced by EGF, results in translocation of MYO6 from the cell surface to membrane ruffles and affects F-actin dynamics. Phosphorylated in vitro by p21-activated kinase (PAK) (By similarity). Similarity: Divided into three regions: a N-terminal motor (head) domain, followed by a neck domain consisting of a calmodulin-binding linker domain and a single IQ motif, and a C-terminal tail region with a three-helix bundle region, a SAH domain and a unique globular domain required for interaction with other proteins such as cargo-binding.The SAH (single alpha-helix) region is characterized by a high content of charged residues which are predicted to stabilize the alpha-helical structure by ionic bonds. Its contribution to the mechanism confering the myosin movement on actin filaments is debated. Belongs to the TRAFAC class myosin-kinesin ATPase superfamily. Myosin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	665505983
NCBI GeneID	4646
NCBI Accession #	NP_001287828.1
NCBI GenBank Nucleotide #	NM_001300899.1
UniProt Accession #	Q9UM54; Q5TEM5; Q5TEM6; Q5TEM7; Q9BZZ7; Q9UEG2; A6H8V4; E1P540
Molecular Weight	Observed: 150 kDa Predicted: 150 kDa
NCBI Official Full Name	unconventional myosin-VI isoform 2

NCBI Official Synonym Full Names	myosin VI
NCBI Official Symbol	MYO6
NCBI Official Synonym Symbols	DFNA22; DFNB37; Myo6-007; Myo6-008
NCBI Protein Information	unconventional myosin-VI
UniProt Protein Name	Unconventional myosin-VI
UniProt Gene Name	**MYO6**
UniProt Synonym Gene Names	KIAA0389

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/polyclonal/myo6-antibody-immunohistochemistry-western-blot-elisa/328048