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Myosin VI Polyclonal Antibody

Catalog # AP73255

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9UM54
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	149691

Additional Information

Gene ID	4646
Other Names	MYO6; KIAA0389; Unconventional myosin-VI; Unconventional myosin-6
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/5000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/5000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	MYO6 (HGNC:7605)
Synonyms	KIAA0389
Function	Myosins are actin-based motor molecules with ATPase activity (By similarity). Unconventional myosins serve in intracellular movements (By similarity). Myosin 6 is a reverse-direction motor protein that moves towards the minus-end of actin filaments (PubMed:10519557). Has slow rate of actin-activated ADP release due to weak ATP binding (By similarity). Functions in a variety of intracellular processes such as vesicular membrane trafficking and cell migration (By similarity). Required for the structural integrity of the Golgi apparatus via the p53-dependent pro-survival pathway (PubMed:16507995). Appears to be involved in a very early step of clathrin-mediated endocytosis in polarized epithelial cells (PubMed:11447109). Together with TOM1, mediates delivery of endocytic cargo to autophagosomes thereby promoting autophagosome maturation and driving fusion with lysosomes (PubMed:23023224). Links TOM1 with autophagy receptors, such as TAX1BP1; CALCOCO2/NDP52 and OPTN

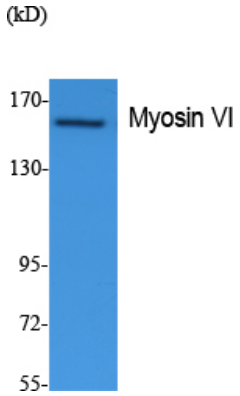
	(PubMed:31371777). May act as a regulator of F-actin dynamics (By similarity). As part of the DISP complex, may regulate the association of septins with actin and thereby regulate the actin cytoskeleton (PubMed:29467281). May play a role in transporting DAB2 from the plasma membrane to specific cellular targets (By similarity). May play a role in the extension and network organization of neurites (By similarity). Required for structural integrity of inner ear hair cells (By similarity). Required for the correct localization of CLIC5 and RDX at the stereocilium base (By similarity). Modulates RNA polymerase II- dependent transcription (PubMed:16949370).
Cellular Location	Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Golgi apparatus. Nucleus. Cytoplasm, perinuclear region. Membrane, clathrin-coated pit. Cytoplasmic vesicle, clathrin-coated vesicle. Cell projection, filopodium. Cell projection, ruffle membrane. Cell projection, microvillus. Cytoplasm, cytosol. Cytoplasmic vesicle, autophagosome. Endosome Note=Also present in endocytic vesicles (PubMed:16507995) Translocates from membrane ruffles, endocytic vesicles and cytoplasm to Golgi apparatus, perinuclear membrane and nucleus through induction by p53 and p53-induced DNA damage (PubMed:16507995). Recruited into membrane ruffles from cell surface by EGF-stimulation (PubMed:9852149) Colocalizes with DAB2 in clathrin-coated pits/vesicles (PubMed:11967127). Colocalizes with OPTN at the Golgi complex and in vesicular structures close to the plasma membrane (By similarity) Recruited to endosomes by TOM1 and TOM1L2 (PubMed:23023224) {ECO:0000250|UniProtKB:Q9I8D1, ECO:0000269|PubMed:11967127, ECO:0000269|PubMed:16507995, ECO:0000269|PubMed:23023224, ECO:0000269|PubMed:9852149} [Isoform 4]: Cytoplasmic vesicle, clathrin-coated vesicle membrane. Cell projection, ruffle membrane
Tissue Location	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

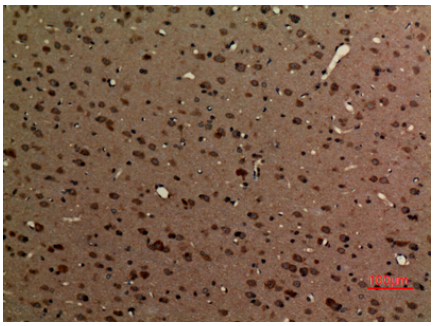
Background

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).

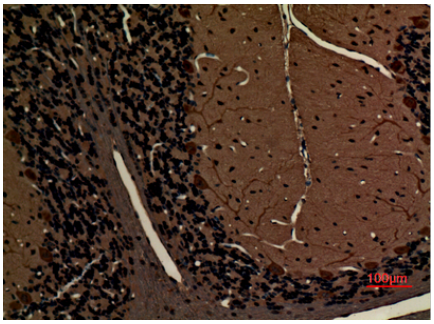
Images

Western Blot analysis of extracts from Jurkat cells, using Myosin VI Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

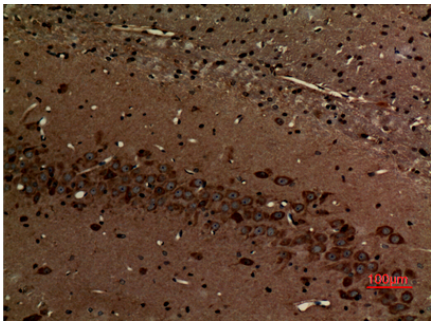




Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded rat-brain, antibody was diluted at 1:100

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