

Anti-MYO10 Antibody

Catalog # AP54008

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9HD67
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	237347

Additional Information

Gene ID	4651
Other Names	KIAA0799; Unconventional myosin-X; Unconventional myosin-10
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MYO10. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C. Stable for 12 months from date of receipt

Protein Information

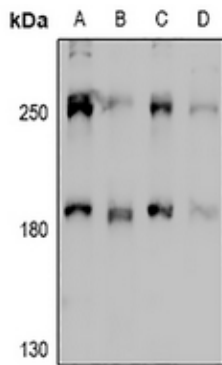
Name	MYO10
Synonyms	KIAA0799
Function	Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. MYO10 binds to actin filaments and actin bundles and functions as a plus end-directed motor. Moves with higher velocity and takes larger steps on actin bundles than on single actin filaments (PubMed:27580874). The tail domain binds to membranous compartments containing phosphatidylinositol 3,4,5-trisphosphate or integrins, and mediates cargo transport along actin filaments. Regulates cell shape, cell spreading and cell adhesion. Stimulates the formation and elongation of filopodia. In hippocampal neurons it induces the formation of dendritic filopodia by trafficking the actin-remodeling protein VASP to the tips of filopodia, where it promotes actin elongation. Plays a role in formation of the podosome belt in osteoclasts.
Cellular Location	Cytoplasm, cytosol. Cell projection, lamellipodium. Cell projection, ruffle.

Cytoplasm, cytoskeleton. Cell projection, filopodium tip. Cytoplasm, cell cortex. Cell projection, filopodium membrane; Peripheral membrane protein. Note=May be in an inactive, monomeric conformation in the cytosol. Detected in cytoplasmic punctae and in cell projections. Colocalizes with actin fibers. Undergoes forward and rearward movements within filopodia Interacts with microtubules

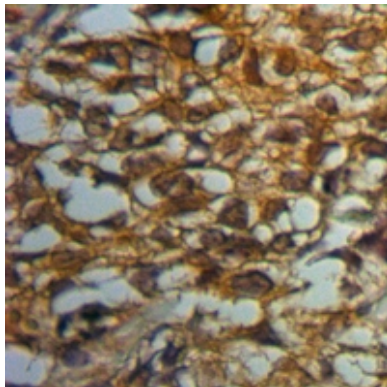
Tissue Location

Ubiquitous..

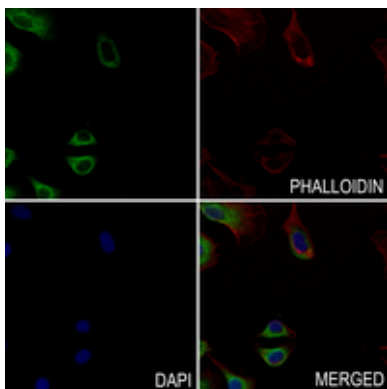
Images



Western blot analysis of MYO10 expression in Hela (A), A2780 (B), C6 (C), NIH3T3 (D) whole cell lysates. (Predicted band size: 237 kD; Observed band size: 250; 190 kD)



Immunohistochemical analysis of MYO10 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MYO10 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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