

MYO10 / Myosin-X Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS15314**Specification**

MYO10 / Myosin-X Antibody (Internal) - Product Information

Application	IHC
Primary Accession	Q9HD67
Reactivity	Human, Mouse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	237kDa KDa

MYO10 / Myosin-X Antibody (Internal) - Additional Information**Gene ID** 4651**Other Names**

Unconventional myosin-X, Unconventional myosin-10, MYO10, KIAA0799

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

MYO10 / Myosin-X Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

MYO10 / Myosin-X Antibody (Internal) - 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..

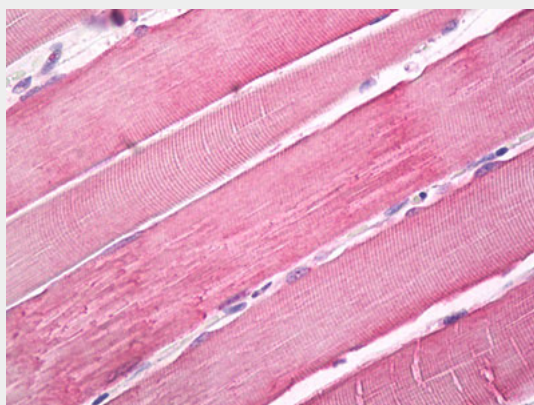
Volume

50 µl

MYO10 / Myosin-X Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MYO10 / Myosin-X Antibody (Internal) - Images

Anti-MYO10 / MYOSIN-X antibody IHC of human skeletal muscle.

MYO10 / Myosin-X Antibody (Internal) - Background

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 plus end-directed motor. 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. May play a role in neurite outgrowth and axon guidance. 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.

MYO10 / Myosin-X Antibody (Internal) - References

Berg J.S.,et al.J. Cell Sci. 113:3439-3451(2000).

Rogers M.S.,et al.J. Biol. Chem. 276:12182-12189(2001).

Takada T.,et al.Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.

Nagase T.,et al.DNA Res. 5:277-286(1998).

Nagase T.,et al.Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases.