

Myosin VIIa Polyclonal Antibody Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58748

Specification

Myosin VIIa Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC-P, IHC-F, IF, E <u>Q13402</u> Rat, Pig, Dog, Bovine Rabbit Polyclonal 254390

Myosin VIIa Polyclonal Antibody - Additional Information

Gene ID 4647

Other Names Unconventional myosin-VIIa, MYO7A, USH1B

Dilution IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Myosin VIIa Polyclonal Antibody - Protein Information

Name MYO7A (HGNC:7606)

Synonyms USH1B

Function

Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails bind to membranous compartments, which are then moved relative to actin filaments. In the retina, plays an important role in the renewal of the outer photoreceptor disks. Plays an important role in the distribution and migration of retinal pigment epithelial (RPE) melanosomes and phagosomes, and in the regulation of opsin transport in retinal photoreceptors. In the inner ear, plays an important role in differentiation, morphogenesis and organization of cochlear hair cell bundles. Involved in hair-cell vesicle trafficking of aminoglycosides, which are known to induce ototoxicity (By similarity). Motor protein that is a part of the functional network formed by USH1C, USH1G, CDH23 and MYO7A that mediates



mechanotransduction in cochlear hair cells. Required for normal hearing.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P97479}. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:P97479}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P97479}. Synapse. Note=In the photoreceptor cells, mainly localized in the inner and base of outer segments as well as in the synaptic ending region (PubMed:8842737). In retinal pigment epithelial cells colocalizes with a subset of melanosomes, displays predominant localization to stress fiber-like structures and some localization to cytoplasmic puncta (PubMed:19643958, PubMed:27331610). Detected at the tip of cochlear hair cell stereocilia (PubMed:21709241). The complex formed by MYO7A, USH1C and USH1G colocalizes with F-actin (PubMed:21709241).

Tissue Location

Expressed in the pigment epithelium and the photoreceptor cells of the retina. Also found in kidney, liver, testis, cochlea, lymphocytes. Not expressed in brain

Myosin VIIa Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Myosin VIIa Polyclonal Antibody - Images



Primary Antibody (green line): Rabbit Anti-Myosin VIIa antibody (bs-7761R) Dilution: $2 \mu g /10^6$ cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-AF488 Dilution: $1 \mu g /test$.



Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 0.1% PBST for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.