

# MYO7A Antibody

Rabbit mAb

Catalog # AP91982

## Product Information

<b>Application</b>	WB, IF, FC, ICC
<b>Primary Accession</b>	<a href="#">Q13402</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	DFNA11; DFNB2; Myo7a; MYU7A; NSRD2; Ush1b;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	254390

## Additional Information

<b>Dilution</b>	WB 1:500~1:2000 ICC/IF 1:50~1:200 FC 1:100
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human Myosin VIIa
<b>Description</b>	Myosins are actin-based motor molecules with ATPase activity. Unconventional myosins serve in intracellular movements. Their highly divergent tails are presumed to bind to membranous compartments, which would be moved relative to actin filaments.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

<b>Name</b>	MYO7A ( <a href="#">HGNC:7606</a> )
<b>Synonyms</b>	USH1B
<b>Function</b>	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

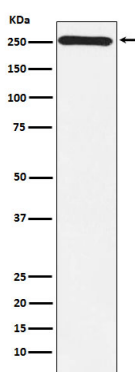
Cytoplasm {ECO:0000250|UniProtKB:P97479}. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:P97479}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P97479}. Synapse. Note=In the photoreceptor cells, mainly localized in the inner and base of outer segments as well as in the synaptic ending region (PubMed:8842737). 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

## Images

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Western blot analysis of Myosin VIIa expression in Y79 cell lysate.

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