

# Anti-MYO7A / Myosin-VIIa Antibody (Internal)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS17437

## Product Information

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<b>Application</b>	WB, IHC-P
<b>Primary Accession</b>	<a href="#">Q13402</a>
<b>Predicted</b>	Human, Mouse, Rat, Pig
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	254390
<b>Concentration (mg/ml)</b>	1 mg/ml

## Additional Information

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<b>Gene ID</b>	4647
<b>Alias Symbol</b>	MYO7A
<b>Other Names</b>	MYO7A, DFNA11, DFNB2, Myosin VIIA, MYOVIIA, MYU7A, USH1B, Unconventional myosin-VIIa, NSRD2
<b>Target/Specificity</b>	Recognizes endogenous levels of MYO7A protein.
<b>Reconstitution &amp; Storage</b>	PBS, pH 7.3, 0.01% sodium azide, 30% glycerol. Store at -20°C. Aliquot to avoid freeze/thaw cycles.
<b>Precautions</b>	Anti-MYO7A / Myosin-VIIa Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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

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

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