Anti-MYO7A antibody

Description	Unconjugated Rabbit polyclonal to MYO7A

Model	STJ191013
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human MYO7A protein.
Immunogen Region	830-910aa
Gene ID	4647
Gene Symbol	MYO7A
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	MYO7A Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in the pigment epithelium and the photoreceptor cells of the retina. Also found in kidney, liver, testis, cochlea, lymphocytes. Not expressed in brain.
Purification	MYO7A antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Unconventional myosin-VIIa
Molecular Weight	243 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7606OMIM:276900
Alternative Names	Unconventional myosin-VIIa
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 . 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.
Sequence and Domain Family	The SAH (single alpha-helix) region is characterized by a high content of charged residues which are predicted to stabilize the alpha-helical structure by ionic bonds.
Cellular Localization	Cytoplasm. Cytoplasm, cell cortex. Cytoplasm, cytoskeleton. In the photoreceptor cells, mainly localized in the inner and base of outer segments as well as in the synaptic ending region. Colocalizes with a subset of melanosomes in retinal pigment epithelium cells. Detected at the tip of cochlear hair cell stereocilia. The complex formed by MYO7A, USH1C and USH1G colocalizes with F-actin.