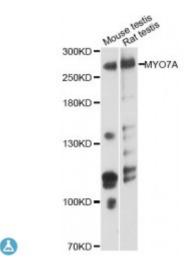


Anti-MYO7A Antibody



Description

This gene is a member of the myosin gene family. Myosins are mechanochemical proteins characterized by the presence of a motor domain, an actin-binding domain, a neck domain that interacts with other proteins, and a tail domain that serves as an anchor. This gene encodes an unconventional myosin with a very short tail. Defects in this gene are associated with the mouse shaker-1 phenotype and the human Usher syndrome 1B which are characterized by deafness, reduced vestibular function, and (in human) retinal degeneration. Alternative splicing results in multiple transcript variants.

Model STJ113558

Host Rabbit

Reactivity Human, Mouse, Rat

Applications WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 850-1150 of human MYO7A (NP_000251.3).

Gene ID 4647

Gene Symbol MYO7A

Dilution range WB 1:500 - 1:2000

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 Affinity purification

Note For Research Use Only (RUO).

Protein Name Unconventional myosin-VIIa

Molecular Weight 254.39 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:7606OMIM:276900Reactome:R-HSA-2453902

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,

Cellular Localization Cytoplasm,

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