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Myosin VIIa Recombinant Rabbit mAb

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Catalog # AP94796

Product Information

Application	WB
Reactivity	Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	244 KDa
Physical State	Liquid
Immunogen	Recombinant mouse Myosin VIIa protein
Epitope Specificity	861-1035/2215
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm (Probable). Note=In the photoreceptor cells, mainly localized in the inner and base of outer segments as well as in the synaptic ending region.
SIMILARITY	Contains 2 FERM domains. Contains 5 IQ domains. Contains 1 myosin head-like domain. Contains 2 MyTH4 domains. Contains 1 SH3 domain.
SUBUNIT	Interacts with PLEKHB1 (via PH domain). Might homodimerize in a two headed molecule through the formation of a coiled-coil rod. Binds MYRIP and WHRN.
DISEASE	Defects in MYO7A are the cause of Usher syndrome type 1B (USH1B) [MIM:276900]. USH is a genetically heterogeneous condition characterized by the association of retinitis pigmentosa and sensorineural deafness. Age at onset and differences in auditory and vestibular function distinguish Usher syndrome type 1 (USH1), Usher syndrome type 2 (USH2) and Usher syndrome type 3 (USH3). USH1 is characterized by profound congenital sensorineural deafness, absent vestibular function and prepubertal onset of progressive retinitis pigmentosa leading to blindness. Defects in MYO7A are the cause of deafness autosomal recessive type 2 (DFNB2) [MIM:600060]; also called neurosensory non-syndromic recessive deafness 2 (NSRD2). DFNB2 is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information. Defects in MYO7A are the cause of deafness autosomal dominant type 11 (DFNA11) [MIM:601317].
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. In retina, myosin VIIa may play a role in trafficking of ribbon-synaptic vesicle complexes and renewal of the outer photoreceptors disks. In inner ear, it may maintain the rigidity of stereocilia during the dynamic movements of the bundle.

Additional Information

Target/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.
Dilution	WB=1:500-2000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

Background

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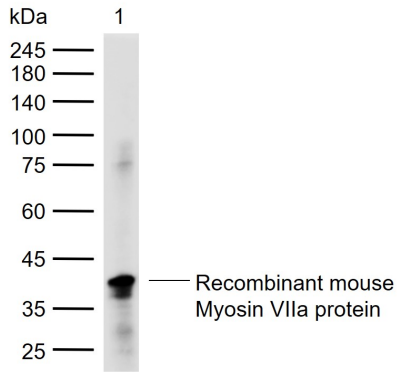
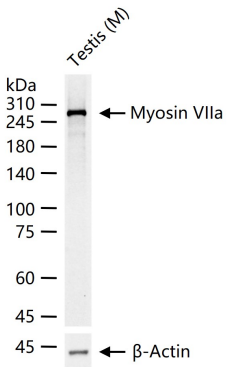
Images



Sample: Lane 1: Recombinant mouse Myosin VIIa protein, N-Trx-His(bs-42234P) Primary: Anti-Myosin VIIa (AP94796) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 244 kDa Observed band size: 42 kDa



25 ug total protein per lane of various lysates (see on figure) probed with Myosin VIIa monoclonal antibody, unconjugated (AP94796) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.