

Product name:	MYO15 Rabbit Polyclonal Antibody
Cat number:	ABN14319
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human protein . at AA range: 2990-3070
Reactivity:	Human, Mouse
Applications:	IHC 1:50-1:300, ICC/IF 1:50-1:200
Molecular Weight:	388kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes an unconventional myosin. This protein differs from other myosins in that it has a long N-terminal extension preceding the conserved motor domain. Studies in mice suggest that this protein is necessary for actin organization in the hair cells of the cochlea. Mutations in this gene have been associated with profound, congenital, neurosensory, nonsyndromal deafness. This gene is located within the Smith-Magenis syndrome region on chromosome 17. Read-through transcripts containing an upstream gene and this gene have been identified, but they are not thought to encode a fusion protein. Several alternatively spliced transcript variants have been described, but their full length sequences have not been determined. [provided by RefSeq, Jul 2008],disease:Defects in MYO15A are the cause of non-syndromic sensorineural deafness autosomal recessive type 3 (DFNB3) [MIM:600316]. DFNB3 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.,function: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. Required for the arrangement of stereocilia in mature hair bundles.,similarity:Contains 1 FERM domain.,similarity:Contains 1 myosin head-like domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 2 MyTH4 domains.,similarity:Contains 3 IQ domains.,subcellular location:Localizes to stereocilium tips in cochlear and vestibular hair cells.,subunit:Interacts with the third PDZ domain of WHRN which is necessary for localization of WHRN to stereocilium tips.,tissue specificity:Highly expressed in pituitary. Also expressed at lower levels in adult brain, kidney, liver, lung, pancreas, placenta and skeletal muscle. Not expressed in brain. In the pituitary, highly expressed in anterior gland cells.,