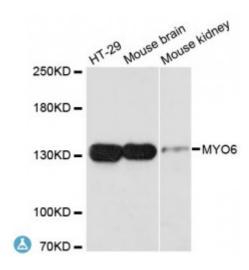


Anti-MYO6 Antibody



Description

This gene encodes a reverse-direction motor protein that moves toward the minus end of actin filaments and plays a role in intracellular vesicle and organelle transport. The protein consists of a motor domain containing an ATP- and an actin-binding site and a globular tail which interacts with other proteins. This protein maintains the structural integrity of inner ear hair cells and mutations in this gene cause non-syndromic autosomal dominant and recessive hearing loss. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Model STJ115000

Host Rabbit

Reactivity Human, Mouse

Applications WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1016-1285 of human MYO6 (NP_004990.3).

Gene ID <u>4646</u>

Gene Symbol MYO6

Dilution range WB 1:500 - 1:2000

Tissue Specificity Expressed in most tissues examined including heart, brain, placenta, pancreas,

spleen, thymus, prostate, testis, ovary, small intestine and colon, Highest levels in brain, pancreas, testis and small intestine, Also expressed in fetal brain and cochlea, Isoform 1 and isoform 2, containing the small insert, and isoform 4, containing neither insert, are expressed in unpolarized epithelial

cells

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Unconventional myosin-VI Unconventional myosin-6

Molecular Weight 149.691 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:7605OMIM:600970Reactome:R-HSA-190873

Alternative Names Unconventional myosin-VI Unconventional myosin-6

Function Myosins are actin-based motor molecules with ATPase activity,

Unconventional myosins serve in intracellular movements, Myosin 6 is a reverse-direction motor protein that moves towards the minus-end of actin filaments, Has slow rate of actin-activated ADP release due to weak ATP binding, Functions in a variety of intracellular processes such as vesicular membrane trafficking and cell migration, Required for the structural integrity of the Golgi apparatus via the p53-dependent pro-survival pathway, Appears to be involved in a very early step of clathrin-mediated endocytosis in polarized epithelial cells, May act as a regulator of F-actin dynamics, May play a role in transporting DAB2 from the plasma membrane to specific cellular targets, Required for structural integrity of inner ear hair cells ,

Cellular Localization Golgi apparatus, trans-Golgi network membrane

Post-translational Phosphorylation in the motor domain, induced by EGF, results in

Modifications translocation of MYO6 from the cell surface to membrane ruffles and affects F-actin dynamics, Phosphorylated in vitro by p21-activated kinase (PAK),

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