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# MYO6 Antibody (C-term R1181)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11566B

## Product Information

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| **Application** | IHC-P, IF, WB, E |
| **Primary Accession** | Q9UM54 |
| **Other Accession** | Q64331, NP_004990.3 |
| **Reactivity** | Human |
| **Predicted** | Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB19127 |
| **Calculated MW** | 149691 |
| **Antigen Region** | 1166-1195 |

## Additional Information

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| **Gene ID** | 4646 |
| **Other Names** | Unconventional myosin-VI, Unconventional myosin-6, MYO6, KIAA0389 |
| **Target/Specificity** | This MYO6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1166-1195 amino acids from the C-terminal region of human MYO6. |
| **Dilution** | IHC-P~~1:100~500 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | MYO6 Antibody (C-term R1181) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | MYO6 ( HGNC:7605) |
| **Synonyms** | KIAA0389 |

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| **Function** | Myosins are actin-based motor molecules with ATPase activity (By similarity). Unconventional myosins serve in intracellular movements (By similarity). Myosin 6 is a reverse-direction motor protein that moves towards the minus-end of actin filaments (PubMed:10519557). Has slow rate of actin-activated ADP release due to weak ATP binding (By similarity). Functions in a variety of intracellular processes such as vesicular membrane trafficking and cell migration (By similarity). Required for the structural integrity of the Golgi apparatus via the p53-dependent pro-survival pathway (PubMed:16507995). Appears to be involved in a very early step of clathrin-mediated endocytosis in polarized epithelial cells (PubMed:11447109). Together with TOM1, mediates delivery of endocytic cargo to autophagosomes thereby promoting autophagosome maturation and driving fusion with lysosomes (PubMed:23023224). Links TOM1 with autophagy receptors, such as TAX1BP1; CALCOCO2/NDP52 and OPTN (PubMed:31371777). May act as a regulator of F-actin dynamics (By similarity). As part of the DISP complex, may regulate the association of septins with actin and thereby regulate the actin cytoskeleton (PubMed:29467281). May play a role in transporting DAB2 from the plasma membrane to specific cellular targets (By similarity). May play a role in the extension and network organization of neurites (By similarity). Required for structural integrity of inner ear hair cells (By similarity). Required for the correct localization of CLIC5 and RDX at the stereocilium base (By similarity). Modulates RNA polymerase II- dependent transcription (PubMed:16949370). |
| **Cellular Location** | Golgi apparatus, trans-Golgi network membrane; Peripheral membrane protein. Golgi apparatus. Nucleus. Cytoplasm, perinuclear region. Membrane, clathrin-coated pit. Cytoplasmic vesicle, clathrin-coated vesicle. Cell projection, filopodium. Cell projection, ruffle membrane. Cell projection, microvillus. Cytoplasm, cytosol. Cytoplasmic vesicle, autophagosome. Endosome Note=Also present in endocytic vesicles (PubMed:16507995) Translocates from membrane ruffles, endocytic vesicles and cytoplasm to Golgi apparatus, perinuclear membrane and nucleus through induction by p53 and p53-induced DNA damage (PubMed:16507995). Recruited into membrane ruffles from cell surface by EGF-stimulation (PubMed:9852149) Colocalizes with DAB2 in clathrin-coated pits/vesicles (PubMed:11967127). Colocalizes with OPTN at the Golgi complex and in vesicular structures close to the plasma membrane (By similarity) Recruited to endosomes by TOM1 and TOM1L2 (PubMed:23023224) {ECO:0000250\|UniProtKB:Q9I8D1, ECO:0000269\|PubMed:11967127, ECO:0000269\|PubMed:16507995, ECO:0000269\|PubMed:23023224, ECO:0000269\|PubMed:9852149} [Isoform 4]: Cytoplasmic vesicle, clathrin-coated vesicle membrane. Cell projection, ruffle membrane |
| **Tissue Location** | 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 |

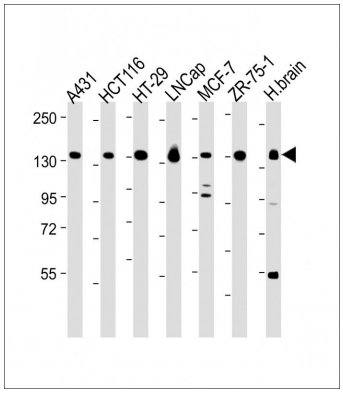
## Background

This gene encodes a protein involved intracellular vesicle and organelle transport, especially in the hair cell of the inner ear. Mutations in this gene have been found in patients with non-syndromic autosomal dominant and recessive hearing loss.

## References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Nishikawa, S., et al. Cell 142(6):879-888(2010)
Cho, S.J., et al. J. Biol. Chem. 285(35):27159-27166(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Szczyrba, J., et al. Mol. Cancer Res. 8(4):529-538(2010)

## Images




All lanes : Anti-MYO6 Antibody (C-term R1181) at 1:2000-1:8000 dilution Lane 1: A431 whole cell lysate Lane 2: HCT116 whole cell lysate Lane 3: HT-29 whole cell lysate Lane 4: LNCap whole cell lysate Lane 5: MCF-7 whole cell lysate Lane 6: ZR-75-1 whole cell lysate Lane 7: Human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 150 kDa Blocking/Dilution buffer: 5% NFDM/TBST.