

Rabbit anti-Human, Mouse MYO6 Polyclonal Antibody | anti-MYO6 antibody

Anti-MYO6 Antibody Picoband

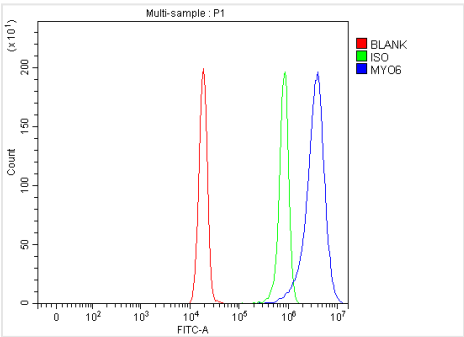
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127132	Rabbit	Human, Mouse	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

MYO6; Polyclonal Antibody; Anti-MYO6 Antibody Picoband; Homeobox protein SIX3; Sine oculis homeobox homolog 3; SIX3; anti-MYO6 antibody

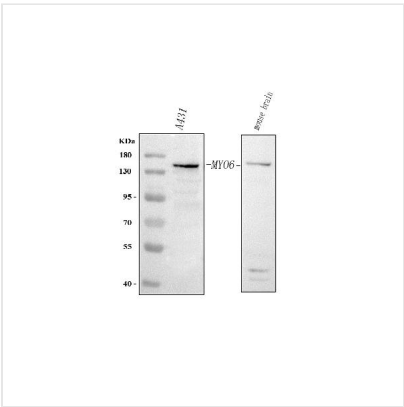
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Highly expressed in placenta, lung, kidney, testis and ovary. Weakly Expressed in spleen and thymus. Not Expressed in peripheral blood lymphocytes. Detected in hippocampus.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-MYO6 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human MYO6 recombinant protein (Position: Q383-H786).
Subcellular Localization	Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Transcriptional regulator which can act as both a transcriptional repressor and activator by binding a ATTA homeodomain core recognition sequence on these target genes. During forebrain development represses WNT1 expression allowing zona limitans intrathalamica formation and thereby ensuring proper antero-posterior patterning of the diencephalon and formation of the rostral diencephalon. Acts as a upstream activator of SHH expression in the rostral diencephalon ventral midline and that in turn SHH maintains its expression. In addition, Six3 activity is required for the formation of the telencephalon. During postnatal stages of brain development is necessary for ependymal cell maturation by promoting the maturation of radial glia into ependymal cells through regulation of neuroblast proliferation and migration. Acts on the proliferation and differentiation of neural progenitor cells through activating transcription of CCND1 AND CCND2. During early lens formation plays a role in lens induction and specification by activating ly PAX6 in the presumptive lens ectoderm. In turn PAX6 activates SIX3 resulting in activation of PDGFRA and CCND1 promoting cell proliferation. Also is required for the neuroretina development by ly suppressing WNT8B expression in the anterior neural plate territory. Its action during retina development and lens morphogenesis is AES and TLE4-dependent manner. Furthermore, during eye development regulates several genes expression. Before and during early lens development represses the CRYGF promoter by binding a SIX repressor element. ly activates RHO transcription, or cooperates with CRX or NRL. Six3 functions also in the formation of the proximodistal axis of the optic cup, and promotes the formation of optic vesicles-like structures. During pituitary development, acts in parallel or alternatively with HESX1 to control cell proliferation through Wnt/beta-catenin pathway (By similarity). Plays a role in eye development by suppressing WNT1 expression and in dorsal- ventral patterning by repressing BMP signaling pathway.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of Hela cells using anti-MYO6 antibody (AAA127132). Overlay histogram showing Hela cells stained with AAA127132 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MYO6 Antibody (AAA127132, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of MYO6 using anti-MYO6 antibody (AAA127132). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A431 whole cell lysates, Lane 2: mouse brain tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MYO6 antigen affinity purified polyclonal antibody (#AAA127132) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MYO6 at approximately 150 kDa. The expected band size for MYO6 is at 150 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MYO6 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-MYO6 antibody	Primary Antibodies; Developmental Families; Domain Families; Epigenetics and Nuclear Signaling; Neurogenesis ; Neurology Process; Neuroscience; Transcription
References	1. Ahituv, N., Sobe, T., Robertson, N. G., Morton, C. C., Taggart, R. T., Avraham, K. B. Genomic structure of the human unconventional myosin VI gene. Gene 261: 269-275, 2000. 2. Ahmed, Z. M., Morell, R. J., Riazuddin, S., Gropman, A., Shaukat, S., Ahmad, M. M., Mohiddin, S. A., Fananapazir, L., Caruso, R. C., Husnain, T., Khan, S. N., Riazuddin, S., Griffith, A. J., Friedman, T. B., Wilcox, E. R. Mutations of MYO6 are associated with recessive deafness, DFN37. Am. J. Hum. Genet. 72: 1315-1322, 2003. 3. Altman, D., Sweeney, H. L., Spudich, J. A. The mechanism of myosin VI translocation and its load-induced anchoring. Cell 116: 737-749, 2004.

NCBI AND UNIPROT INFORMATION

NCBI GI #	665505983
NCBI GeneID	4646
NCBI Accession #	NP_001287828.1
NCBI GenBank Nucleotide #	NM_001300899.1
UniProt Accession #	Q9UM54; Q5TEM5; Q5TEM6; Q5TEM7; Q9BZZ7; Q9UEG2; A6H8V4; E1P540
NCBI Official Full Name	unconventional myosin-VI isoform 2
NCBI Official Synonym Full Names	myosin VI
NCBI Official Symbol	MYO6
NCBI Official Synonym Symbols	DFNA22; DFN37

NCBI Protein Information	unconventional myosin-VI; unconventional myosin-6
UniProt Protein Name	Unconventional myosin-VI
UniProt Gene Name	MYO6
UniProt Synonym Gene Names	KIAA0389
UniProt Entry Name	MYO6_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/myo6-antibody-flow-cytometry-western-blot-elisa/127132>