

Rabbit anti-Human, Mouse MYO1B Polyclonal Antibody | anti-MYO1B antibody

Anti-MYO1B Antibody Picoband

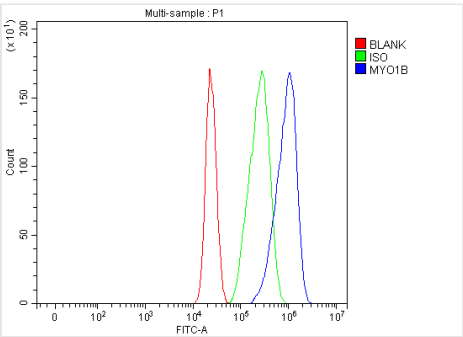
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127416	Rabbit	Human, Mouse	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

MYO1B; Polyclonal Antibody; Anti-MYO1B Antibody Picoband; ADAM metallopeptidase domain 28; aldo-keto reductase family 7 member A2; Aflatoxin B1 aldehyde reductase member 2; AFB1 aldehyde reductase 1; AFB1-AR 1; Aldoketoreductase 7; Succinic semialdehyde reductase; SSA reductase; AKR7A2; AFAR; AFAR1; AKR7; anti-MYO1B antibody

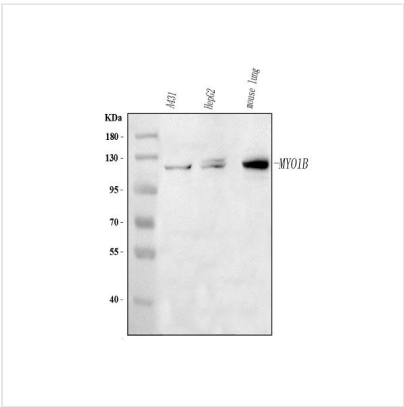
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in basement membranes of lung and kidney. Muscle- and neuron-specific isoforms are found. Isoforms (y+) with the 4 AA insert and (z+8) isoforms with the 8 AA insert are all neuron-specific. Isoforms (z+11) are found in both neuronal and non-neuronal tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-MYO1B antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human MYO1B recombinant protein (Position: R231-R1125).
Subcellular Localization	Golgi apparatus. Cytoplasm.
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	Catalyzes the NADPH-dependent reduction of succinic semialdehyde to gamma-hydroxybutyrate. May have an important role in producing the neuromodulator gamma-hydroxybutyrate (GHB). Has broad substrate specificity. Has NADPH-dependent aldehyde reductase activity towards 2-carboxybenzaldehyde, 2-nitrobenzaldehyde and pyridine-2-aldehyde (in vitro). Can reduce 1,2-naphthoquinone and 9,10-phenanthrenequinone (in vitro). Can reduce the dialdehyde protein-binding form of aflatoxin B1 (AFB1) to the non-binding AFB1 dialcohol. May be involved in protection of liver against the toxic and carcinogenic effects of AFB1, a potent hepatocarcinogen.
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 MCF-7 cells using anti-MYO1B antibody (AAA127416). Overlay histogram showing MCF-7 cells stained with AAA127416 (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-MYO1B Antibody (AAA127416, 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 MYO1B using anti-MYO1B antibody (AAA127416). 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: human HepG2 whole cell lysates, Lane 3: mouse lung 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-MYO1B antigen affinity purified polyclonal antibody (#AAA127416) 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 MYO1B at approximately 124 kDa. The expected band size for MYO1B is at 132 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MYO1B 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-MYO1B antibody	Primary Antibodies; Epigenetics and Nuclear Signaling; Pol II Transcription; Polymerase Associated Factors; Transcription
References	1. Bement, W. M., Hasson, T., Wirth, J. A., Cheney, R. E., Mooseker, M. S. Identification and overlapping expression of multiple unconventional myosin genes in vertebrate cell types. Proc. Nat. Acad. Sci. 91: 6549-6553, 1994. Note: Erratum: Proc. Nat. Acad. Sci. 91: 11767 only, 1994.

NCBI AND UNIPROT INFORMATION

NCBI GI #	194328685
NCBI GeneID	4430
NCBI Accession #	NP_001123630.1
NCBI GenBank Nucleotide #	NM_001130158.1
UniProt Accession #	O43795; O43794; Q7Z6L5
Molecular Weight	124,951 Da
NCBI Official Full Name	unconventional myosin-Ib isoform 1
NCBI Official Synonym Full Names	myosin IB
NCBI Official Symbol	MYO1B
NCBI Official Synonym Symbols	myr1
NCBI Protein Information	unconventional myosin-Ib; MMIa; MYH-1c; MMI-alpha; myosin I alpha; myosin-I alpha; MYO1B variant protein

UniProt Protein Name	Unconventional myosin-Ib
UniProt Gene Name	MYO1B
UniProt Synonym Gene Names	MMI-alpha; MMIa
UniProt Entry Name	MYO1B_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/myo1b-antibody-flow-cytometry-western-blot-elisa/127416>