

Rabbit Myosin IIA Heavy Chain Polyclonal Antibody | anti-MYH9 antibody

Myosin IIA Heavy Chain (a.a. 1936-1950) Antibody

CATALOG # AAA71661	HOST Rabbit	REACTIVITY Human, Rat, Mouse	APPLICATIONS Immunocytochemistry, ELISA, Western Blot
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PRODUCT SYNONYMS

Myosin IIA Heavy Chain; Polyclonal Antibody; Myosin IIA Heavy Chain (a.a. 1936-1950) Antibody; Myosin IIA Heavy Chain (a.a. 1936-1950); Myosin HC02; anti-MYH9 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was affinity purified using nMHC-IIA (a.a. 1936-1950) peptide (without carrier). The antibody detects a 200kDa* protein corresponding to the apparent molecular mass of nMHC-IIA on SDS-PAGE immunoblots of human A431, Jurkat, mouse C2C12, and rat PC12 cells.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-MYH9 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	NMHC-IIA (a.a. 1936-1950) synthetic peptide (coupled to KLH) corresponding to amino acid residues in the C-terminal region of human myosin IIA heavy chain. This peptide sequence is highly conserved in rat and mouse nMHC-IIA, but is not found in nMHC-IIB and is not well conserved in nMHC-IIC.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of Slingshot-1L in rat PC12 cells differentiated with NGF. The cells were labeled with rabbit polyclonal anti-Myosin IIA Heavy Chain (a.a. 1936-1950), then detected using appropriate secondary antibody conjugated to Cy3. The antibody was used in the absence (left) or presence (right) of blocking peptide (MX3795).



WB (Western Blot)

Western blot image of human A431 cells. The blots were untreated (lanes 1 & 3) or treated with lambda phosphatase (lanes 2 & 4), then probed with rabbit polyclonal Myosin IIA Heavy Chain (Ser-1943), phospho-specific antibody (lanes 1 & 2) or rabbit polyclonal Myosin IIA Heavy Chain (a.a. 1936-1950) antibody (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-MYH9 antibody	Nonmuscle myosin II is an actin-based motor protein essential to cell motility, cell division, migration, adhesion and polarity. This myosin forms a hexameric complex comprised of two heavy chains (NMHC-II), two essential light chains, and two regulatory light chains (RLC). In vertebrates, there are threeNMHC-II isoforms (NMHC-IIA, nMHC-IIB, andnMHC-IIC), which exhibit distinct patterns of expression in cells and tissues. Regulation ofnMHC-II activity occurs through RLC and HC phosphorylation. RLCs are phosphorylated at Thr-18 and Ser-19, leading to activation of myosin II motor activity and increased myosin filament stability. By contrast, PKC phosphorylation of Ser-1/Ser-2 and Thr-9 in RLC may decrease activated myosin II interaction with actin.nMHC-II phosphorylation may be an important mode for regulating myosin-II assembly. PKC phosphorylatesnMHC-IIA on Ser-1916 in the C-terminal region andnMHC-IIB on multiple serines in the tailpiece. Casein kinase II phosphorylatesnMHC-IIA on Ser-1943 in the tailpiece and increases disassembly ofnMHC-IIA filaments.
References	Breckenridge, M.T. et al. (2009) Mol Biol Cell 20:338. Conti, M.A. & Adelstein, R.S. (2008) J Cell Sci. 121:11. Dulyaninova, N.G. et al. (2007) Mol Biol Cell 18:3144. Murakami, N. et al. (1998) Biochemistry 37:1989.

NCBI AND UNIPROT INFORMATION

NCBI GI #	12667788
NCBI GeneID	4627
NCBI Accession #	NP_002464.1
NCBI GenBank Nucleotide #	NM_002473.5
UniProt Accession #	P35579; O60805; Q60FE2; Q86T83; A8K6E4
Molecular Weight	226,532 Da
NCBI Official Full Name	myosin-9
NCBI Official Synonym Full Names	myosin, heavy chain 9, non-muscle
NCBI Official Symbol	MYH9
NCBI Official Synonym Symbols	MHA; FTNS; EPSTS; BDPLT6; DFNA17; NMMHCA; NMHC-II-A; NMMHC-IIA
NCBI Protein Information	myosin-9; myosin heavy chain 9; non-muscle myosin heavy chain A; non-muscle myosin heavy chain IIa; nonmuscle myosin heavy chain II-A; myosin heavy chain, non-muscle IIa; cellular myosin heavy chain, type A; non-muscle myosin heavy polypeptide 9
UniProt Protein Name	Myosin-9
UniProt Gene Name	MYH9
UniProt Synonym Gene Names	NMMHC-A; NMMHC II-a; NMMHC-IIA
UniProt Entry Name	MYH9_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/myosin-ii-heavy-chain-antibody-immunocytochemistry-western-blot-elisa/71661>