

MYL2 monoclonal antibody, clone AT3B2

Catalog # MAB5641

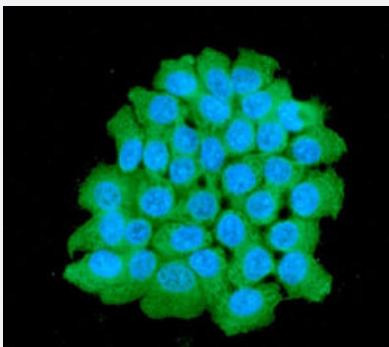
Size 100 uL

Applications



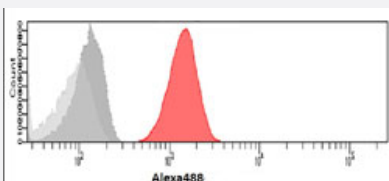
Western Blot (Tissue lysate)

Western blot analysis of mouse heart tissue lysate.



Immunofluorescence

Immunofluorescence analysis of A431 cells. The cell was stained with MYL2 monoclonal antibody, clone AT3B2 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



Flow Cytometry

Flow cytometry analysis of A431 cells. The cell was stained with MYL2 monoclonal antibody, clone AT3B2 at 2-5 ug for 1x10⁶ cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Specification

Product Description

Mouse monoclonal antibody raised against full length recombinant MYL2.

Immunogen	Recombinant protein corresponding to full length human MYL2.
Host	Mouse
Reactivity	Human, Rat
Form	Liquid
Purification	Protein A purification
Isotype	IgG2b, kappa
Recommend Usage	ELISA Flow Cytometry Immunocytochemistry Immunofluorescence Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

Western blot analysis of mouse heart tissue lysate.

- Immunocytochemistry

- Immunofluorescence

Immunofluorescence analysis of A431 cells. The cell was stained with MYL2 monoclonal antibody, clone AT3B2 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometry analysis of A431 cells. The cell was stained with MYL2 monoclonal antibody, clone AT3B2 at 2-5 ug for 1×10^6 cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).

Gene Info — MYL2

Entrez GeneID	4633
Protein Accession#	NP_000423
Gene Name	MYL2
Gene Alias	CMH10, DKFZp779C0562, MLC2
Gene Description	myosin, light chain 2, regulatory, cardiac, slow
Omim ID	160781 608758
Gene Ontology	Hyperlink
Gene Summary	Thus gene encodes the regulatory light chain associated with cardiac myosin beta (or slow) heavy chain. Ca ⁺ triggers the phosphorylation of regulatory light chain that in turn triggers contraction. Mutations in this gene are associated with mid-left ventricular chamber type hypertrophic cardiomyopathy. [provided by RefSeq]
Other Designations	RLC of myosin cardiac ventricular myosin light chain 2 myosin light chain 2 myosin regulatory light chain 2, ventricular/cardiac muscle isoform myosin, light polypeptide 2, regulatory, cardiac, slow regulatory light chain of myosin slow cardiac myosin reg

Publication Reference

- [Mutations in either the essential or regulatory light chains of myosin are associated with a rare myopathy in human heart and skeletal muscle.](#)

Poetter K, Jiang H, Hassanzadeh S, Master SR, Chang A, Dalakas MC, Rayment I, Sellers JR, Fananapazir L, Epstein ND.
Nature Genetics 1996 May; 13(1):63.

- [Localization of the gene coding for ventricular myosin regulatory light chain \(MYL2\) to human chromosome 12q23-q24.3.](#)

Macera MJ, Szabo P, Wadgaonkar R, Siddiqui MA, Verma RS.
Genomics 1992 Jul; 13(3):829.

Application: IF, IHC, WB-Ce, WB-Tr, Human, Mammalian cells

Pathway

- [Focal adhesion](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)

- [Leukocyte transendothelial migration](#)
- [Regulation of actin cytoskeleton](#)
- [Tight junction](#)

Disease

- [Cardiomegaly](#)
- [Cardiomyopathy](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Genetic Predisposition to Disease](#)