

MYBPC3 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12436a

Specification

MYBPC3 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	Q14896
Other Accession	P56741 , Q70468 , NP_000247.2
Reactivity	Human, Mouse, Rat
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	189-218

MYBPC3 Antibody (N-term) - Additional Information

Gene ID 4607

Other Names

Myosin-binding protein C, cardiac-type, Cardiac MyBP-C, C-protein, cardiac muscle isoform, MYBPC3

Target/Specificity

This MYBPC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 189-218 amino acids from the N-terminal region of human MYBPC3.

Dilution

WB~~1:2000

IHC-P~~1:25

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

MYBPC3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MYBPC3 Antibody (N-term) - Protein Information

Name MYBPC3

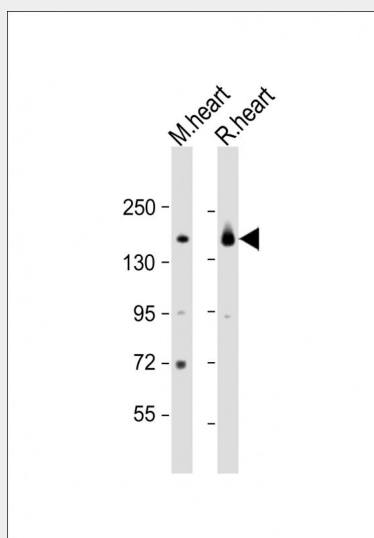
Function Thick filament-associated protein located in the crossbridge region of vertebrate striated muscle a bands. In vitro it binds MHC, F- actin and native thin filaments, and modifies the activity of actin- activated myosin ATPase. It may modulate muscle contraction or may play a more structural role.

MYBPC3 Antibody (N-term) - Protocols

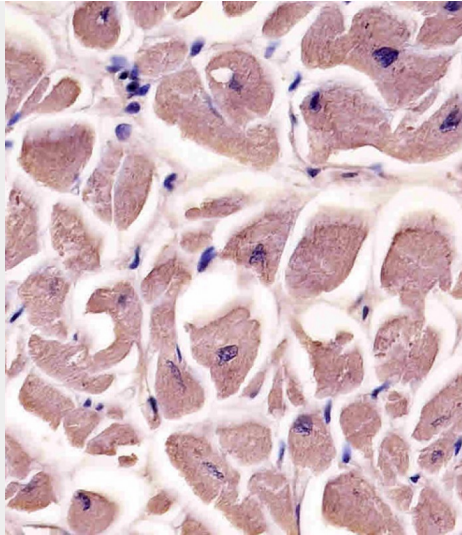
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

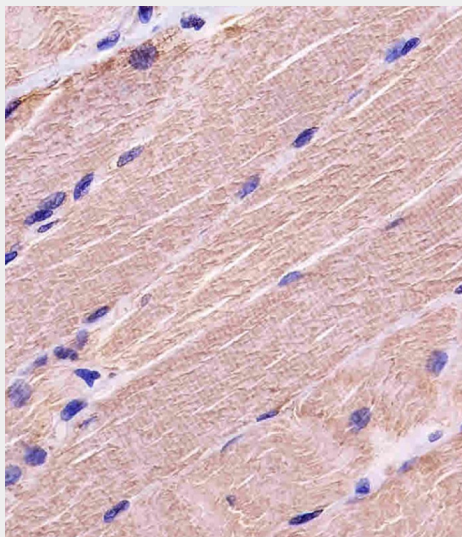
MYBPC3 Antibody (N-term) - Images



All lanes : Anti-MYBPC3 Antibody (N-term) at 1:2000 dilution Lane 1: mouse heart lysate Lane 2: rat heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 141 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AP12436A staining MYBPC3 in human heart tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AP12436A staining MYBPC3 in human skeletal muscle tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

MYBPC3 Antibody (N-term) - Background

MYBPC3 encodes the cardiac isoform of myosin-binding protein C. Myosin-binding protein C is a myosin-associated protein found in the cross-bridge-bearing zone (C region) of A bands in striated muscle. MYBPC3, the cardiac isoform, is expressed exclusively in heart muscle. Regulatory phosphorylation of the cardiac isoform in vivo by cAMP-dependent protein kinase (PKA) upon adrenergic stimulation may be linked to modulation of cardiac

contraction. Mutations in MYBPC3 are one cause of familial hypertrophic cardiomyopathy.

MYBPC3 Antibody (N-term) - References

Millat, G., et al. Clin. Chim. Acta 411 (23-24), 1983-1991 (2010) :

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)

Millat, G., et al. Eur J Med Genet 53(5):261-267(2010)

Zimmerman, R.S., et al. Genet. Med. 12(5):268-278(2010)

Brion, M., et al. Ann. Clin. Lab. Sci. 40(3):285-289(2010)

MYBPC3 Antibody (N-term) - Citations

- [Functional characterization of human myosin-binding protein C3 variants associated with hypertrophic cardiomyopathy reveals exon-specific cardiac phenotypes in zebrafish model](#)