

MYBPC3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5399

Product Information

Application WB Primary Accession Q14896

Other Accession <u>P56741</u>, <u>O70468</u>, <u>NP_000247.2</u>

Reactivity Mouse, Rat
Predicted Human
Host Rabbit
Clonality Polyclonal
Calculated MW 140762
Isotype Rabbit IgG
Antigen Source HUMAN

Additional Information

Gene ID 4607

Antigen Region 189-218

Other Names Myosin-binding protein C, cardiac-type, Cardiac MyBP-C, C-protein, cardiac

muscle isoform, MYBPC3

Dilution WB~~1:1000

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.

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.

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.

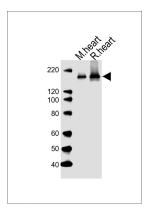
Background

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 exclussively 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.

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)

Images



All lanes: Anti-MYBPC3 Antibody (N-term) at 1:1000 dilution Lane 1: mouse heart lysates Lane 2: rat heart lysates 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.