Product Name: MYBPC3 Rabbit Polyclonal Antibody
Catalog #: APRab14264
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300
Molecular Weight	140kDa

Antigen Information

Gene Name	MYBPC3
Alternative Names	Myosin-binding protein C, cardiac-type (Cardiac MyBP-C) (C-protein, cardiac muscle isoform)
Gene ID	4607.0
SwissProt ID	Q14896
Immunogen	Synthesized peptide derived from human MYBPC3 Polyclonal

Background

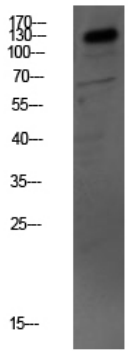
MYBPC3 encodes the cardiac isoform of myosin-binding protein C. Myosin-binding protein C is a myosin-associated protein

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. [provided by RefSeq, Jul 2008],disease:Defects in MYBPC3 are the cause of cardiomyopathy familial hypertrophic type 4 (CMH4) [MIM:115197]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death.,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.,PTM:Substrate for phosphorylation by PKA and PKC. Reversible phosphorylation appears to modulate contraction.,similarity:Belongs to the immunoglobulin superfamily. MyBP family.,similarity:Contains 3 fibronectin type-III domains.,similarity:Contains 7 Ig-like C2-type (immunoglobulin-like) domains.,

Research Area

Hypertrophic cardiomyopathy (HCM);Dilated cardiomyopathy;

Image Data



Western blot analysis of mouse-kidney lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000