

# Immunotag™ MYBPC3 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT6151
Product Description	Immunotag™ MYBPC3 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	MYBPC3
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000, ELISA 1:10000-20000
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from human MYBPC3 Polyclonal
Specificity	This antibody detects endogenous levels of MYBPC3.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	MYBPC3
Accession No.	Q14896 O70468
Alternate Names	Myosin-binding protein C, cardiac-type (Cardiac MyBP-C) (C-protein, cardiac muscle isoform)

## Antibody Specification

Description	myosin binding protein C, cardiac(MYBPC3) Homo sapiens 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. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Hypertrophic cardiomyopathy (HCM),Dilated cardiomyopathy,
Protein Expression	Donated clones,Heart,Pooled,
Subcellular Localization	cytosol,striated muscle myosin thick filament,C zone,sarcomere,A band,
Protein Function	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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.