

MYBPC2 Antibody
Catalog # ASC11088**Specification**

MYBPC2 Antibody - Product Information

Application	WB, IHC
Primary Accession	Q14324
Other Accession	EAW71866 , 119592272
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	MYBPC2 antibody can be used for detection of MYBPC2 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL.

MYBPC2 Antibody - Additional Information

Gene ID	4606
Target/Specificity	
MYBPC2;	

Reconstitution & Storage

MYBPC2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

MYBPC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MYBPC2 Antibody - Protein Information

Name MYBPC2

Synonyms MYBPCF

Function

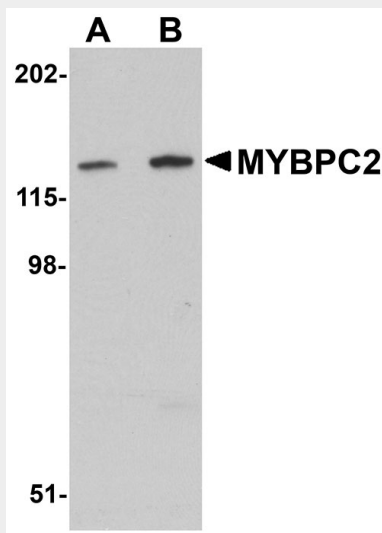
Thick filament-associated protein located in the crossbridge region of vertebrate striated muscle a bands. In vitro it binds MHC, F- actin and native thin filaments, and modifies the activity of actin-activated myosin ATPase. It may modulate muscle contraction or may play a more structural role.

MYBPC2 Antibody - 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](#)

MYBPC2 Antibody - Images



Western blot analysis of MYBPC2 in mouse skeletal muscle tissue lysate with MYBPC2 antibody at (A) 1 and (B) 2 μ g/mL.



Immunohistochemistry of MYBPC2 in mouse skeletal muscle tissue with MYBPC2 antibody at 5 μ g/mL.

MYBPC2 Antibody - Background

MYBPC2 Antibody: Myosin binding protein C (MYBPC) is a component of the thick filament of striated muscle, with the fast-type isoform designated MYBPC2. Both the fast-type and slow-type MYBPC protein contains seven immunoglobulin C2 motifs and three fibronectin type-III repeats. MYBPC2 is typically required for strong contractions and functions under anaerobic conditions. It is more similar to the cardiac isoform (MYBPC3) than to the slow-type isoform (MYBPC1) in terms of pCa50-indexed force development, length-independent cooperativity and length dependent activation. It has been suggested that in cardiac and fast muscle MYBPC2 contributes to an internal load, possibly by binding to actin via its N-terminal region.

MYBPC2 Antibody - References

Weber FE, Vaughan KT, Reiach FC, et al. Complete sequence of human fast-type and slow-type muscle myosin-binding-protein C (MyBP-C). Differential expression, conserved domain structure and chromosome assignment. Eur. J. Biochem.1993; 216:661-9.

Konhilas JP, Irving TC and De Tombe PP. Length-dependent activation in three striated muscle types of the rat. J. Physiol.2002; 544:225-36.

Flashman E, Korkie L, Watkins H, et al. Support for a trimeric collar of myosin binding protein C in cardiac and fast skeletal muscle, but not in slow skeletal muscle. FEBS Lett.2008; 582:434-8.