

MYBPC2 Antibody

Catalog # ASC11088

Product Information

Application	WB, E, IHC-P
Primary Accession	Q14324
Other Accession	EAW71866 , 119592272
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	128072
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	MYBPC2 antibody can be used for detection of MYBPC2 by Western blot at 1 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL.

Additional Information

Gene ID	4606
Other Names	Myosin-binding protein C, fast-type, Fast MyBP-C, C-protein, skeletal muscle fast isoform, MYBPC2, MYBPCF
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.

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.

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.

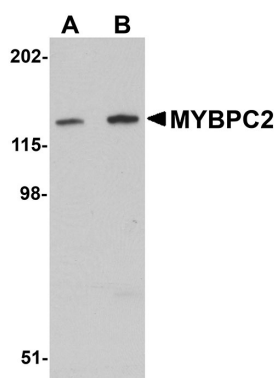
References

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.

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.

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