

MYBPC1 Antibody

Catalog # ASC11087

Product Information

Application	IF, E, IHC-P
Primary Accession	Q00872
Other Accession	NP_002456 , 45976288
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	128294
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	MYBPC1 antibody can be used for detection of MYBPC1 by immunohistochemistry at 5 µg/mL. For immunofluorescence start at 5 µg/mL.

Additional Information

Gene ID	4604
Other Names	Myosin-binding protein C, slow-type, Slow MyBP-C, C-protein, skeletal muscle slow isoform, MYBPC1, MYBPCS
Target/Specificity	MYBPC1;
Reconstitution & Storage	MYBPC1 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	MYBPC1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MYBPC1
Synonyms	MYBPCS
Function	Thick filament-associated protein located in the crossbridge region of vertebrate striated muscle a bands. Slow skeletal protein that binds to both myosin and actin (PubMed: 31025394 , PubMed: 31264822). In vitro, binds to native thin filaments and modifies the activity of actin-activated myosin ATPase. May modulate muscle contraction or may play a more structural role.

Background

MYBPC1 Antibody: Myosin binding protein C (MYBPC) is a component of the thick filament of striated muscle, with the slow-type isoform designated MYBPC1. Both the fast-type (MYBPC2) and slow-type MYBPC protein contains seven immunoglobulin C2 motifs and three fibronectin type-III repeats. Multiple isoforms of MYBPC1 are known to exist, and are present in varying amounts in different skeletal muscles. It is thought that the MYBPC1 slow subfamily may play important roles in the assembly and stabilization of sarcomeric M- and A-bands and regulate the contractile properties of the actomyosin filaments.

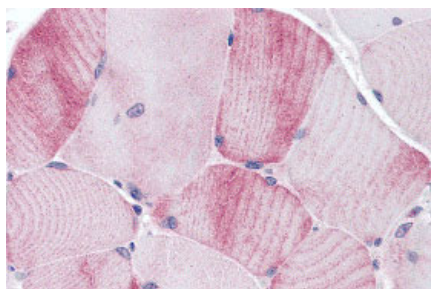
References

Furst DO, Vinkemeir U and Weber K. Mammalian skeletal muscle C-protein: purification from bovine muscle, binding to titin and the characterization of a full-length human cDNA. *J. Cell Sci.* 1992; 102:769-78.

Weber FE, Vaughan KT, Reiaich 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.

Ackermann MA and Kontogianni-Konstantopoulous A. Myosin binding protein-C slow: an intricate subfamily of proteins. *J. Biomed. Biotech.* 2010; 2010:652065

Images



Immunohistochemistry of MYBPC1 in human skeletal muscle tissue with MYBPC1 antibody at 5 µg/mL.

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