

Datasheet: MCA2780

Description:	MOUSE ANTI HUMAN TROPONIN I (CARDIAC/PHOSPHORYLATED)
Specificity:	TROPONIN I (CARDIAC/PHOSPHORYLATED)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1G11
Isotype:	IgG2b
Quantity:	0.2 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA	■			
Immunoprecipitation			■	
Western Blotting (1)	■			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) **For the detection of phosphoproteins, phosphatase inhibitors such as 10mM Sodium Fluoride and 1mM Sodium Orthovanadate should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.**

Target Species	Human
Species Cross Reactivity	Reacts with: Rat, Cat, Bovine, Dog, Goat, Pig N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1 mg/ml

Immunogen	Phosphorylated form of human cardiac Troponin I.
External Database Links	<p>UniProt: P19429 Related reagents</p> <p>Entrez Gene: 7137 TNNI3 Related reagents</p>
Synonyms	TNNC1
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 mouse myeloma cell line.
Specificity	<p>Mouse anti Human Troponin I (Cardiac/Phosphorylated) antibody, clone 1G11 recognizes the phosphorylated form of human cardiac Troponin I (cTnI). Troponin I is a 24kDa subunit of Troponin, a protein found on muscle tissue responsible for muscle contraction. When calcium binds to Troponin C, a conformational change moves Troponin I and tropomyosin out of the way of the myosin binding sites on the actin filaments in muscles. This allows cross-bridging to occur and the muscle to contract. Levels of cTnI in serum are commonly used as a marker for cardiac cell damage and death.</p> <p>Phosphorylation of cTnI results in changes in the activity and function of Troponin. One possible form of phosphorylation is by Protein kinase A. Protein kinase A phosphorylation of serine 22 and serine 23 reduces calcium sensitivity of Troponin and leads to an acceleration in relaxation. Changes in cTnI phosphorylation have been reported in failing hearts.</p> <p>Mouse anti Human Troponin I (Cardiac/Phosphorylated) antibody, clone 1G11 recognizes free cTnI and cTnI in complex with other Troponin components. It does not cross-react with skeletal Troponin I.</p>
References	<ol style="list-style-type: none"> 1. Sakthivel, S. <i>et al.</i> (2005) In vivo and in vitro analysis of cardiac troponin I phosphorylation. J Biol Chem. 280 (1): 703-14. 2. Layland, J. <i>et al.</i> (2005) Regulation of cardiac contractile function by troponin I phosphorylation. Cardiovasc Res. 66 (1): 12-21.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Shelf Life	18 months from date of despatch.
Health And Safety Information	<p>Material Safety Datasheet documentation available at:</p> <p>Material Safety Datasheet Documentation #10040 available at: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG2b (HCA038...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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Printed on 06 Mar 2018