

Datasheet: MCA2779

Description:	MOUSE ANTI HUMAN TROPONIN I (CARDIAC/DEPHOSPHORYLATED)
Specificity:	TROPONIN I (CARDIAC/DEPHOSPHORYLATED)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	22B11
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	▪			

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.

Target Species

Human

Species Cross Reactivity

Reacts weakly with:Pig

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Dephosphorylated 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
RRID	AB_2206265
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/Dephosphorylated) antibody, clone 22B11 recognizes the dephosphorylated 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/Dephosphorylated) antibody, clone 22B11 recognizes the dephosphorylated form of cTnI. It specifically recognizes amino acid residues 20-24 on cTnI. The antibody will recognize free dephosphorylated cTnI or dephosphorylated cTnI in complex with other troponin components. MCA2779 does not cross react with phosphorylated cTnI or with skeletal TnI.</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	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2779 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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