

## Datasheet: MCA2780

<b>Description:</b>	MOUSE ANTI HUMAN TROPONIN I (CARDIAC/PHOSPHORYLATED)
<b>Specificity:</b>	TROPONIN I (CARDIAC/PHOSPHORYLATED)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1G11
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://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 with: Rat, Cat, Bovine, Dog, Goat, 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

<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	Phosphorylated form of human cardiac Troponin I.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P19429</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7137</a>    TNNI3    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	TNNC1
<b>RRID</b>	AB_2206266
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Troponin I (Cardiac/Phosphorylated) antibody, clone 1G11</b> 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>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Sakthivel, S. <i>et al.</i> (2005) In vivo and in vitro analysis of cardiac troponin I phosphorylation. <a href="#">J Biol Chem. 280 (1): 703-14.</a></li> <li>2. Layland, J. <i>et al.</i> (2005) Regulation of cardiac contractile function by troponin I phosphorylation. <a href="#">Cardiovasc Res. 66 (1): 12-21.</a></li> </ol>
<b>Storage</b>	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.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2780">https://www.bio-rad-antibodies.com/SDS/MCA2780</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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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