

Datasheet: MCA2779

BATCH NUMBER 050815

| | |
|----------------------|--|
| 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 | 0.09% Sodium Azide |
| 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 Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2779>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

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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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