# Datasheet: MCA470

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| **Description:** | MOUSE ANTI CHICKEN TROPONIN T |
| **Specificity:** | TROPONIN T |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | T1/61 |
| **Isotype:** | IgG1 |
| **Quantity:** | 0.25 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 | ▪ | | | |
| Immunofluorescence | ▪ | | | |

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**

Chicken

**Species Cross Reactivity**

Reacts with: Human, Quail
Does not react with:Rabbit
**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 G from tissue culture supernatant

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| **Buffer Solution** | Phosphate buffered saline |
| **Preservative Stabilisers** | 0.09% Sodium Azide |
| **Carrier Free** | Yes |
| **Approx. Protein Concentrations** | IgG concentration 1.0 mg/ml |
| **Immunogen** | Troponin T, purified from chicken breast muscle |
| **External Database Links** | **UniProt:**<br>P12620 Related reagents<br><br>**Entrez Gene:**<br>395761 TNNT3 Related reagents |
| **RRID** | AB_2206754 |
| **Fusion Partners** | Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line. |
| **Specificity** | **Mouse anti Chicken Troponin T antibody, clone T1/61** recognizes chicken Troponin T, fast skeletal muscle isoforms, also known as fast muscle Troponin T. Troponin T is a 262 amino acid tropomyosin binding component of the troponin complex with a predicted molecular mass of ~31 kDa.<br><br>Four isoforms of Troponin T generated by alternative splicing have been described. Mouse anti Chicken Troponin T antibody, clone T1/61 recognizes the canonical isoform 1, binding to othe potential isoforms has not been evaluated (UniProt : P12620). |
| **Immunohistology** | This product does not require protein digestion pre-treatment of paraffin sections.This product does not require antigen retrieval using heat treatment prior to staining of paraffin sections. |
| **Histology Positive Control Tissue** | Skeletal muscle |
| **References** | 1. Bird, I.M. *et al.* (1985) Identification of multiple variants of fast muscle troponin T in the chicken using monoclonal antibodies. Eur J Biochem. 150 (3): 517-25.<br>2. Watkins, H. *et al.* (1996) Expression and functional assessment of a truncated cardiac troponin T that causes hypertrophic cardiomyopathy. Evidence for a dominant negative action. J Clin Invest. 98: 2456-61.<br>3. Marian, A.J. *et al.* (1997) Expression of a mutant (Arg92Gln) human cardiac troponin T, known to cause hypertrophic cardiomyopathy, impairs adult cardiac myocyte contractility. Circ Res. 81: 76-85.<br>4. Dunnick, J.K. *et al.* (2004) Cardiac damage in rodents after exposure to bis(2- |

chloroethoxy)methane. Toxicol Pathol. 32: 309-17.
5. Herman, E.H. *et al.* (1999) Correlation between serum levels of cardiac troponin-T and the severity of the chronic cardiomyopathy induced by doxorubicin. J Clin Oncol. 17: 2237-43.
6. Zhang, J. *et al.* (2008) Isoproterenol-induced cardiotoxicity in sprague-dawley rats: correlation of reversible and irreversible myocardial injury with release of cardiac troponin T and roles of iNOS in myocardial injury. Toxicol Pathol. 36: 277-8.
7. Sweeney, H.L. *et al.* (1998) Functional analyses of troponin T mutations that cause hypertrophic cardiomyopathy: insights into disease pathogenesis and troponin function. Proc Natl Acad Sci U S A. 95: 14406-10.
8. Zhang, J. *et al.* (2006) Mechanisms and biomarkers of cardiovascular injury induced by phosphodiesterase inhibitor III SK&F 95654 in the spontaneously hypertensive rat. Toxicol Pathol. 34: 152-63.
9. Baharom, F. *et al.* (2016) Dendritic Cells and Monocytes with Distinct Inflammatory Responses Reside in Lung Mucosa of Healthy Humans. J Immunol. 196 (11): 4498-509.

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| **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.<br><br>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 |
| **Health And Safety Information** | Material Safety Datasheet documentation #10040 available at:<br>10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Secondary Antibodies

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| 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 |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| 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 (H/L) (STAR117...) | Alk. Phos., DyLight®488, DyLight®680, DyLight®800, FITC, HRP |
| Goat Anti Mouse IgG (STAR70...) | 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

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