

## Cardiac Troponin T Rabbit mAb

Catalog No: #48966

Package Size: #48966-1 50ul #48966-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

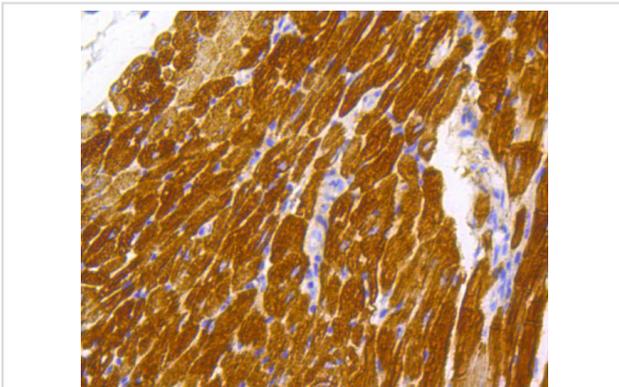
## Description

Product Name	Cardiac Troponin T Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC64-03
Purification	ProA affinity purified
Applications	WB, IHC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	Cardiac muscle troponin T antibody Cardiomyopathy dilated 1D (autosomal dominant) antibody Cardiomyopathy hypertrophic 2 antibody CMD1D antibody CMH2 antibody CMPD2 antibody cTnT antibody LVNC6 antibody MGC3889 antibody OTTHUMP00000033864 antibody OTTHUMP00000033865 antibody OTTHUMP00000033866 antibody OTTHUMP00000033867 antibody OTTHUMP00000033870 antibody OTTHUMP00000218095 antibody RCM3 antibody TNNT 2 antibody TNNT2 antibody TNNT2_HUMAN antibody TnTc antibody Troponin T cardiac muscle antibody Troponin T type 2 (cardiac) antibody Troponin T type 2 cardiac antibody Troponin T, cardiac muscle antibody Troponin T2 cardiac antibody
Accession No.	Swiss-Prot#:P45379
Calculated MW	36 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

## Application Details

WB: 1:1,000-1:2,000 IHC: 1:100-1:500

## Images



Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-Cardiac Troponin T antibody. Counter stained with hematoxylin.

## Background

Actin is a highly conserved protein that is expressed in all eukaryotic cells. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. Myosin is a hexamer of two heavy chains (MHC) and four light chains (MLC) that interacts with Actin to generate the force for diverse cellular movements, including cytokinesis, phagocytosis and muscle contraction. Troponin facilitates the interaction between Actin and Myosin by binding to calcium. Troponin is made up of at least two subunits, which are divergent in cardiac muscle, fast skeletal muscle and slow skeletal muscle. Structures of skeletal muscle troponin are composed of Troponin C (the sensor), Troponin I (the regulator) and Troponin T (the link to the muscle thin filament). Troponin C is dumbbell-shaped and has a hydrophobic pocket that increases the contractile force of muscle fibers. Troponin C has two isoforms: fast and slow. Fast Troponin C has two calcium binding sites, while slow/cardiac Troponin C has a single calcium binding site.

## References

1. Szabo *et al.* Generation of a Homozygous Transgenic Rat Strain Stably Expressing a Calcium Sensor Protein for Direct Examination of Calcium Signaling. *Sci Rep* 5:12645 (2015).
2. Becker JR *et al.* Differential activation of natriuretic peptide receptors modulates cardiomyocyte proliferation during development. *Development* 141:335-45 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.