

**ARG62381**  
anti-Cardiac Troponin I antibody [2D5]Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [2D5] recognizes Cardiac Troponin I
Tested Reactivity	Hu
Tested Application	ELISA, IHC-P, IP, WB
Specificity	Reacts with subunit I of the troponin complex in human myocardium,
Host	Mouse
Clonality	Monoclonal
Clone	2D5
Isotype	IgG1
Target Name	Cardiac Troponin I
Species	Human
Immunogen	Purified human cardiac troponin I
Conjugation	Un-conjugated
Alternate Names	RCM1; cTnI; Cardiac troponin I; TNNC1; CMD1FF; CMD2A; Troponin I, cardiac muscle; CMH7

### Application Instructions

Application Note	ELISA: 1/500 - 1/1000. IHC-P: 1/25 - 1/50. WB: 1/50 - 1/100. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
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### Properties

Form	Liquid
Purification	Protein A purified
Buffer	PBS (pH 7.2), 0.2% BSA and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Stabilizer	0.2% BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Database links	<a href="#">GeneID: 7137 Human</a> <a href="#">Swiss-port # P19429 Human</a>
Gene Symbol	TNNI3
Gene Full Name	troponin I type 3 (cardiac)
Background	Troponin I is the inhibitory subunit of troponin, blocking actin-myosin interactions and thereby mediating striated muscle relaxation. Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM).
Function	Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Controls and Markers antibody; Developmental Biology antibody; Signaling Transduction antibody
Calculated Mw	24 kDa
PTM	Phosphorylated at Ser-42 and Ser-44 by PRKCE; phosphorylation increases myocardium contractile dysfunction (By similarity). Phosphorylated at Ser-23 and Ser-24 by PRKD1; phosphorylation reduces myofilament calcium sensitivity. Phosphorylated preferentially at Thr-31. Phosphorylation by STK4/MST1 alters its binding affinity to TNNC1 (cardiac Tn-C) and TNNT2 (cardiac Tn-T).