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.

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

Database links	GeneID: 7137 Human Swiss-port # P19429 Human
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).