

cTnI Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1042a

Specification

cTnI Antibody - Product Information

Application	WB, IHC
Primary Accession	P19429
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

Description

cTnI has an apparent molecular weight of 22.5 kDa. cTnI is a candidate marker with acceptable sensitivity and specificity for AMI and other cardiac diseases. Troponin, a molecule that binds to the thin filament (actin) of striated muscle fibers, acts with intracellular calcium to control the interaction of the thin filament with the thick filament (myosin), thus regulating muscle contraction. Troponin I prevents muscle contraction in the absence of calcium, which has two skeletal muscle isoforms with considerable amino acid sequence homology. cTnI contains an additional N-terminal sequence and is highly specific for myocardium.

Immunogen

Purified recombinant fragment of cTnI expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

cTnI Antibody - Additional Information

Gene ID 7137

Other Names

Troponin I, cardiac muscle, Cardiac troponin I, TNNI3, TNNC1

Dilution

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

cTnI Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

cTnI Antibody - Protein Information

Name TNNI3

Synonyms TNNC1

Function

Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.

cTnI Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

cTnI Antibody - Images

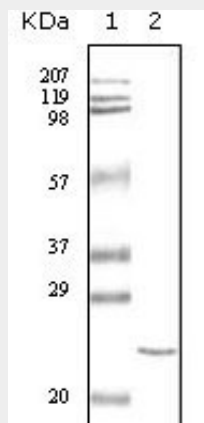


Figure 1: Western blot analysis using cTnI mouse mAb against truncated cTnI recombinant protein.

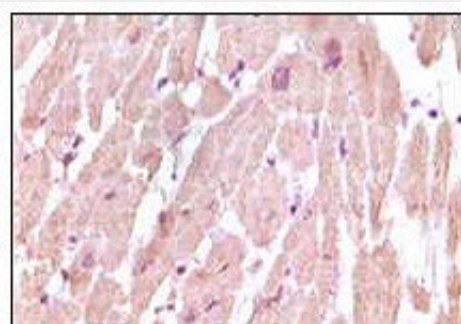


Figure 2: Immunohistochemical analysis of paraffin-embedded human normal cardiac muscle tissue, showing cytoplasmic localization using cTnI mouse mAb with DAB staining.

cTnI Antibody - References

1. Cummins B and Cummins P, J Mol Cell Cardiol, 1987, 19(10):999-1010. 2. Cummins B, Auckland ML, and Cummins P, Am Heart J, 1987, 113(6):1333-44. 3. Darnell J, Lodish H, and Baltimore D, Molecular Cell Biology, New York, NY: Scientific American Books, 1986, 827-8. 4. Larue C, Defacque-Lacquemant H, Calzolari C, et al, Mol Immunol, 1992, 29(2):271-8. 5. Adams JE III, Bodor GS, Davila-Roman VG, et al, Circulation, 1993, 88(1):101-6.

cTnI Antibody - Citations

- [ID3 may protect mice from anti-GBM glomerulonephritis by regulating the differentiation of Th17 and Treg cells.](#)
- [Foxp3 overexpression in tumor cells predicts poor survival in oral squamous cell carcinoma.](#)