

Product datasheet for UM800096CF

OriGene Technologies, Inc.

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Troponin C1 (TNNC1) Mouse Monoclonal Antibody [Clone ID: UMAB204]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB204

Applications: 10k-ChIP, IHC, WB **Recommended Dilution:** IHC 1:100~200

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human TNNC1 (NP_003271) produced in E.coli.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 18.2 kDa

Gene Name: troponin C1, slow skeletal and cardiac type

Database Link: NP 003271

Entrez Gene 21924 MouseEntrez Gene 290561 RatEntrez Gene 7134 Human

P63316





Background: Troponin is a central regulatory protein of striated muscle contraction, and together with

tropomyosin, is located on the actin filament. Troponin consists of 3 subunits: TnI, which is the inhibitor of actomyosin ATPase; TnT, which contains the binding site for tropomyosin; and TnC, the protein encoded by this gene. The binding of calcium to TnC abolishes the inhibitory action of TnI, thus allowing the interaction of actin with myosin, the hydrolysis of ATP, and the generation of tension. Mutations in this gene are associated with

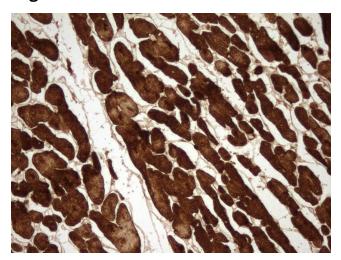
cardiomyopathy dilated type 1Z. [provided by RefSeg, Oct 2008]

Synonyms: CMD1Z; CMH13; TN-C; TNC; TNNC

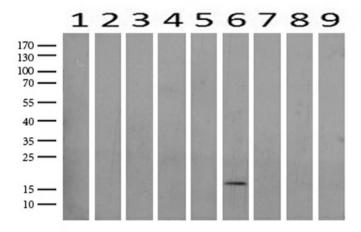
Protein Pathways: Calcium signaling pathway, Cardiac muscle contraction, Dilated cardiomyopathy,

Hypertrophic cardiomyopathy (HCM)

Product images:

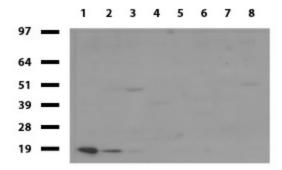


Immunohistochemical staining of paraffinembedded Human adult heart tissue using anti-TNNC1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.0) at 120°C for 3min, [UM800096]) (1:200)

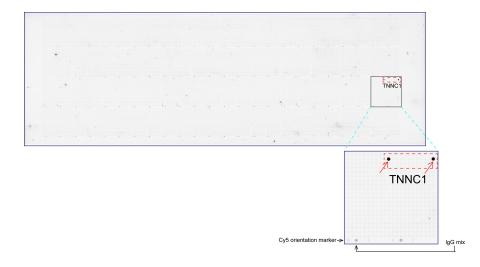


Western blot analysis of extracts (15ug) from 9 Human tissue by using anti-TNNC1 monoclonal antibody (1: Testis; 2: Uterus; 3: Breast; 4: Brain; 5: Liver; 6: Ovary; 7: Thyroid gland; 8: colon;;9:Spleen). (1:500) Dilution: 1:500





Western blot of cell lysates (35ug) from 8 different cell lines (1: HepG2, 2: HeLa, 3: SV-T2, 4: MCF7, 5: COS7, 6: Jurkat, 7: MDCK, 8: PC-12). Diluation: 1:500.



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-TNNC1 mouse monoclonal antibody ([UM800096]). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification (1:100).