

Troponin T Type 2, Cardiac (TNNT2) Active Protein | TNNT2 active protein

Active Troponin T Type 2, Cardiac (TNNT2)

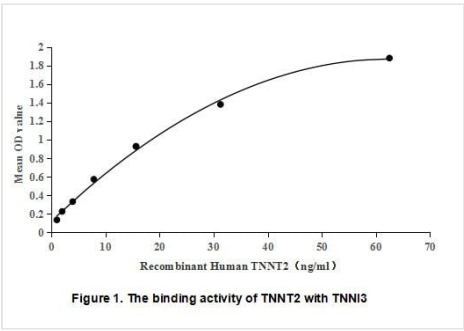
CATALOG # AAA152235	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Troponin T Type 2; Cardiac (TNNT2); Active Troponin T Type 2; TNNT2/Troponin T Type 2; Cardiac; CMH2; cTnT; TnTc; Cardiomyopathy; Hypertrophic 2; Cardiac muscle troponin T; TNNT2 active protein

PRODUCT SPECIFICATIONS

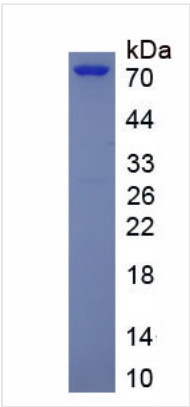
Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300. Freeze-dried powder
Sequence	Met1~Lys29 5
Applicable Applications for TNNT2 active protein	Activity Assay, Cell Culture
Species	Human
Isoelectric Point	4.6
Tag	N-terminal His and GST Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months Stable for 12 months if correctly stored.



Bioactivity

Troponin T Type 2, Cardiac (TNNT2) is one of three troponin isoforms found in the tropomyosin-troponin complex. This complex is responsible for the calcium sensitivity of the contractile apparatus in the muscle. Cardiac Troponin T is used as a biological marker for cardiomyocytes and its level in serum is frequently used as an indicator of myocardial cell injury. Besides, Troponin I Type 3, Cardiac (TNNI3) has been identified as an interactor of TNNT2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human TNNT2 and recombinant human TNNI3. Briefly, TNNT2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100ul were then transferred to TNNI3-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-TNNT2 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450/630nm immediately. The binding activity of TNNT2 and TNNI3 was shown in Figure 1, and this effect was in a dose dependent manner.

SDS-PAGE
SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for TNNT2 active protein	Cardiovascular biology; Active proteins/AP
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NCBI AND UNIPROT INFORMATION

NCBI GI #	15290516
NCBI GeneID	7139
UniProt Accession #	P45379; O60214; Q99596; Q99597; Q9BUF6; Q9UM96; A2TDB9; A8K3K6
Molecular Weight	35,924 Da
NCBI Official Full Name	cardiac troponin T
NCBI Official Synonym Full Names	troponin T type 2 (cardiac)
NCBI Official Symbol	TNNT2
NCBI Official Synonym Symbols	CMH2; RCM3; TnTC; cTnT; CMPD2; LVNC6
NCBI Protein Information	troponin T, cardiac muscle; troponin T2, cardiac; cardiomyopathy, hypertrophic 2; cardiomyopathy, dilated 1D (autosomal dominant)
UniProt Protein Name	Troponin T, cardiac muscle
UniProt Gene Name	TNNT2
UniProt Synonym Gene Names	TnTc; cTnT
UniProt Entry Name	TNNT2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

