Troponin T-C Polyclonal Antibody

OPR4092

Reactivity	H,M,R	**Storage**	-20°C, 1 year. Avoid freeze/ thaw cycles
Source	Rabbit	**Applications**	WB;IHC;IF;ELISA
Isotype	IgG	**Concentration**	1mg/mL

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Immunogen Information

Immunogen The antiserum was produced against synthesized peptide derived from the Internal region of human TNNT2. AA range:131-180

Purification The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Synonyms TNNT2; Troponin T, cardiac muscle; TnTc; Cardiac muscle troponin T; cTnT

Product Information

Observed MW 35kD

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Dilution WB: 1/500 - 1/2000; IHC-p: 1/100-1/300; ELISA: 1/20000; IF 1:50-200

Other applications have not been tested. Optimal dilutions/concentrations should be determined by the end user.

Tissue Specificity

Heart. The Fetal heart shows a greater expression in the atrium than in the ventricle, while the adult heart shows a greater expression in the ventricle than in the atrium. Isoform 6 predominates in normal adult heart. Isoforms 1, 7 and 8 are expressed in fetal heart. Isoform 7 is also expressed in failing adult heart.

Cell Pathway

Cytosol, troponin complex, striated muscle thin filament, Sarcomere

Functions

Alternative products: Additional isoforms seem to exist. Experimental confirmation may be lacking for some isoforms. disease: Defects in TNNT2 are the cause of cardiomyopathy dilated type 1D (CMD1D) [MIM:601494]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death. disease: Defects in TNNT2 are the cause of cardiomyopathy familial hypertrophic type 2 (CMH2) [MIM:115195]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign

Background

The protein encoded by this gene is the tropomyosin-binding subunit of the troponin complex, which is located on the thin filament of striated muscles and regulates muscle contraction in response to alterations in intracellular calcium ion concentration. Mutations in this gene have been associated with familial hypertrophic cardiomyopathy as well as with dilated cardiomyopathy. Transcripts for this gene undergo alternative splicing that results in many tissue-specific isoforms, however, the full-length nature of some of these variants has not yet been determined.

Research Use

For research use only, not for use in diagnostic procedures.

Legend

Applications: WB-Western Blot; IHC-Immunohistochemistry; IF-Immunofluorescence; IP-Immunoprecipitation; FC-Flow cytometry; ChIP-Chromatin Immunoprecipitation

Reactivity: H-Human; R-Rat; M-Mouse; Mk-Monkey; Dg-Dog; Ch-Chicken; Hm-Hamster; Rb-Rabbit; Sh- Sheep; Pg-Pig; Z-Zebrafish; X-Xenopus; C-Cow.