

TNNT2 Conjugated Antibody

Catalog No: #C38195



Package Size: #C38195-AF350 100ul #C38195-AF405 100ul #C38195-AF488 100ul
 #C38195-AF555 100ul #C38195-AF594 100ul #C38195-AF647 100ul
 #C38195-AF680 100ul #C38195-AF750 100ul #C38195-Biotin 100ul

Orders: order@signalwayantibody.com
 Support: tech@signalwayantibody.com

Description

Product Name	TNNT2 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total TNNT2 antibody.
Immunogen Description	Recombinant Protein of human TNNT2 .
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	TNNT2 ; Cardiac muscle troponin T; Troponin T; cardiac muscle; troponin T type 2 (cardiac); cTnT; TnTC
Accession No.	Swiss-Prot#:P45379NCBI Gene ID:7139
Uniprot	P45379
GeneID	7139;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	36
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Background

Troponin, working in conjunction with tropomyosin, functions as a molecular switch, regulating muscle contraction in response to changes in the intracellular Ca^{2+} concentration. Troponin consists of three subunits: the Ca^{2+} -binding subunit troponin C (TnC), the tropomyosin-binding subunit troponin T (TnT), and the inhibitory subunit troponin I (TnI) (1). In response to β -adrenergic stimulation of the heart, Ser23 and Ser24 of TnI (cardiac) are phosphorylated by PKA and PKC. This phosphorylation stimulates a conformational change of the regulatory domain of TnC, reduces the association between TnI and TnC, and decreases myofilament Ca^{2+} sensitivity by reducing the Ca^{2+} binding affinity of TnC (1-3). The tropomyosin binding subunit of the troponin complex TnT exists as different isoforms in slow skeletal muscle (ssTnT/TNNT1), fast skeletal muscle (fsTnT/TNNT3) and in cardiac muscle (cTnT/TNNT2). Each of these may also contain multiple alternatively spliced variants. Assays for measuring serum concentrations of cTnT, as well as cTnI, have been reported for analyzing cardiac injury.

Note: This product is for in vitro research use only