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Rabbit Anti-Syntrophin-1+2+3 antibody

SL10382R

Product Name	Syntrophin-1+2+3
Chinese Name	互养蛋白 1,2,3 抗体
Alias	SNTA1_HUMAN; SNTB1_HUMAN; SNTB2_HUMAN; Beta-1-syntrophin; Beta-2-syntrophin; alpha-1-syntrophin; Syntrophin-1; Syntrophin-2; Syntrophin-3; 59kDa dystrophin-associated protein A1 basic component 2; SNT1; SNT2; SNT3; SNTA1; SNTB1; SNTB2; Syntrophin alpha 1; Syntrophin beta 1; Syntrophin beta 2.
Research Area	Cell biology Neurobiology Binding protein Transmembrane protein The cell membrane 蛋白
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Cow,Rabbit,Sheep)
Applications	WB=1:500-2000 （Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	59kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Syntrophin-1+2+3: 51-150/505
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Syntrophins are cytoplasmic peripheral membrane scaffold proteins that are components of the dystrophin-associated protein complex. This gene is a member of the syntrophin gene family and encodes the most common syntrophin isoform found in cardiac tissues. The N-terminal PDZ domain of this syntrophin protein interacts with the C-terminus of the pore-forming alpha subunit (SCN5A) of the cardiac sodium channel Nav1.5. This protein also associates cardiac sodium channels with the nitric oxide synthase-PMCA4b (plasma membrane Ca-ATPase subtype 4b) complex in cardiomyocytes. This gene is a susceptibility locus for Long-QT syndrome (LQT) - an inherited disorder associated with sudden cardiac death from arrhythmia - and sudden infant death syndrome (SIDS). This protein also associates with dystrophin and dystrophin-related proteins at the neuromuscular junction and alters intracellular calcium ion levels in muscle tissue. [provided by RefSeq, Jan 2013].

Function:
Adapter protein that binds to and probably organizes the subcellular localization of a variety of membrane proteins. May link various receptors to the actin cytoskeleton and the dystrophin glycoprotein complex. May play a role in the regulation of secretory granules via its interaction with PTPRN.

Product Detail

Subunit:
Monomer and homodimer (Probable). Interacts with the other members of the syntrophin family: SNTA1 and SNTB1; and with the sodium channel proteins SCN4A and SCN5A. Interacts with SAST, MAST205, microtubules and microtubule-associated proteins. Interacts with the dystrophin protein DMD and related proteins DTNA and UTRN, and with the neuroregulin receptor ERBB4. Interacts with PTPRN when phosphorylated, protecting PTPRN from protein cleavage by CAPN1. Dephosphorylation upon insulin stimulation disrupts the interaction with PTPRN and results in the cleavage of PTPRN.

Subcellular Location:
Membrane. Cytoplasmic vesicle, secretory vesicle membrane; Peripheral membrane protein. Cell junction. Cytoplasm, cytoskeleton.
Note=Membrane-associated. In muscle, it is exclusively localized at the neuromuscular junction. In insulinoma cell line, it is enriched in secretory granules.

Tissue Specificity:
Ubiquitous. Isoform 1 is the predominant isoform. Weak level of isoform 2 is present in all tested tissues, except in liver and heart where it is highly expressed.

Post-translational modifications:
Phosphorylated. Partially dephosphorylated upon insulin stimulation.

Similarity:
Belongs to the syntrophin family.
Contains 1 PDZ (DHR) domain.
Contains 2 PH domains.
Contains 1 SU (syntrophin unique) domain.

SWISS:
Q13424

Gene ID:
6640

Database links:

Entrez Gene: 6640 Human

Entrez Gene: 20648 Mouse

Entrez Gene: 100009179 Rabbit

Entrez Gene: 362242 Rat

Omim: 601017 Human

SwissProt: Q13424 Human

SwissProt: Q61234 Mouse

SwissProt: Q28626 Rabbit

Unigene: 31121 Human

Unigene: 1541 Mouse

Unigene: 139656 Rat