



## Rabbit Anti-Syntrophin-1 antibody

SL10221R

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|-------------------------------|--|
| <b>Product Name:</b>          | Syntrophin-1   |
| <b>Chinese Name:</b>          | 神经肌肉接头蛋白SNTA1抗体  |
| <b>Alias:</b>                 | Syntrophin alpha 1; SNTA1_HUMAN; Alpha-1-syntrophin; 59 kDa dystrophin-associated protein A1 acidic component 1; Pro-TGF-alpha cytoplasmic domain-interacting protein 1; TACIP1; Syntrophin-1.   |
| <b>Organism Species:</b>      | Rabbit   |
| <b>Clonality:</b>             | Polyclonal   |
| <b>React Species:</b>         | Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,Sheep,  |
| <b>Applications:</b>          | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user.   |
| <b>Molecular weight:</b>      | 56kDa  |
| <b>Cellular localization:</b> | The cell membrane  |
| <b>Form:</b>                  | Lyophilized or Liquid  |
| <b>Concentration:</b>         | 1mg/ml   |
| <b>immunogen:</b>             | KLH conjugated synthetic peptide derived from human Syntrophin-1:101-200/505   |
| <b>Lsotype:</b>               | IgG  |
| <b>Purification:</b>          | affinity purified by Protein A   |
| <b>Storage Buffer:</b>        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.   |
| <b>Storage:</b>               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.  |
| <b>PubMed:</b>                | <a href="#">PubMed</a>   |
| <b>Product Detail:</b>        | 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 extracellular matrix via the dystrophin glycoprotein complex. Plays an important role in synapse formation and in the organization of UTRN and acetylcholine receptors at the neuromuscular synapse. Binds to phosphatidylinositol 4,5-bisphosphate.

**Subunit:**

Monomer and homodimer. Interacts with the other members of the syntrophin family SNTB1 and SNTB2; SGCG and SGCA of the dystrophin glycoprotein complex; NOS1; GRB2; the sodium channel proteins SCN4A and SCN5A; F-actin and calmodulin (By similarity). Interacts with dystrophin protein DMD and related proteins DTNA and UTRN and with MAPK12, TGFA and GA.

**Subcellular Location:**

Cell membrane, sarcolemma; Peripheral membrane protein; Cytoplasmic side. Cell junction. Cytoplasm, cytoskeleton. Note=In skeletal muscle, it localizes at the cytoplasmic side of the sarcolemmal membrane and at neuromuscular junctions.

**Tissue Specificity:**

High expression in skeletal muscle and heart. Low expression in brain, pancreas, liver, kidney and lung. Not detected in placenta.

**Post-translational modifications:**

Phosphorylated by CaM-kinase II. Phosphorylation may inhibit the interaction with DMD.

**DISEASE:**

Defects in SNTA1 are the cause of long QT syndrome type 12 (LQT12) [MIM:612955]. A heart disorder characterized by a prolonged QT interval on the ECG and polymorphic ventricular arrhythmias. They cause syncope and sudden death in response to exercise or emotional stress, and can present with a sentinel event of sudden cardiac death in infancy.

**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: 6641](#)Human

[Entrez Gene: 6645](#)Human

[SwissProt: Q13424](#)Human

[SwissProt: Q13425](#)Human

[SwissProt: Q13884](#)Human

[SwissProt: Q61234](#)Mouse

[Unigene: 31121](#)Human

[Unigene: 1541](#)Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.