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Syntrophin Alpha1 Recombinant Rabbit mAb

Catalog # AP99554

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q13424
Other Accession	Q13424
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	53895
Physical State	Liquid
Immunogen	A synthesized peptide derived from human alpha 1 Syntrophin
Epitope Specificity	1-53/505
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the syntrophin family.Contains 1 PDZ (DHR) domain.Contains 2 PH domains. Contains 1 SU (syntrophin unique) domain.
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.
Post-translational modifications	Phosphorylated. Partially dephosphorylated upon insulin stimulation.
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 excercise or emotional stress, and can present with a sentinel event of sudden cardiac death in infancy.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	6640

Other Names	LQT12; SNT1; TACIP1; dJ1187J4.5; SNTA1_HUMAN; SNTA1; 59 kDa dystrophin-associated protein A1 acidic component 1; Pro-TGF-alpha cytoplasmic domain-interacting protein 1 (TACIP1); Syntrophin-1; SNTA1_MOUSE; SNTA1_RABIT; 59-1 DAP; syntrophin alpha 1; syntrophin, alpha 1 (dystrophin-associated protein A1, 59kD, acidic component); pro-TGF-alpha cytoplasmic domain-interacting protein 1; dystrophin-associated protein A1, 59kDa, acidic component
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1:50-100
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	SNTA1
Synonyms	SNT1
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 (By similarity).
Cellular 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 Location	High expression in skeletal muscle and heart. Low expression in brain, pancreas, liver, kidney and lung. Not detected in placenta

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.