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Syntrophin alpha 1 Rabbit mAb

Catalog # AP76143

Product Information

Application	WB, IHC-P, FC
Primary Accession	Q13424
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	53895

Additional Information

Gene ID	6640
Other Names	SNTA1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:100-1:200
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

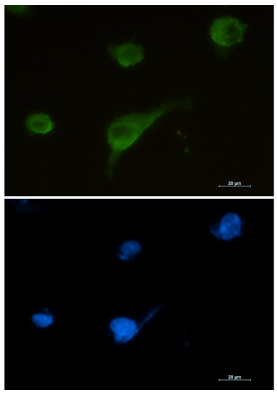
Name	SNTA1
Synonyms	SNT1
Function	Adapter protein that binds to and probably organizes the subcellular localization of a variety of membrane proteins. May link various receptors to the actin cytoskeleton and the extracellular matrix via the dystrophin glycoprotein complex. Plays an important role in 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

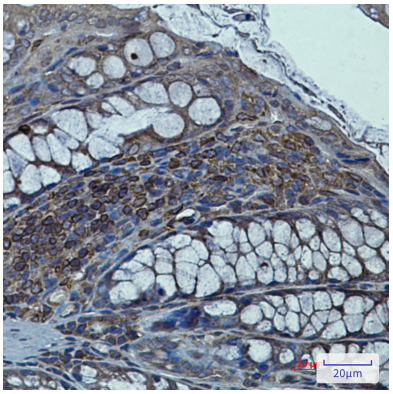
Background

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.

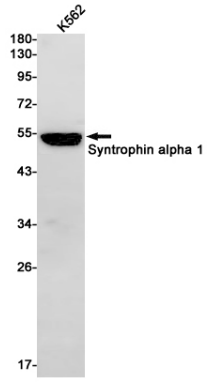
Images



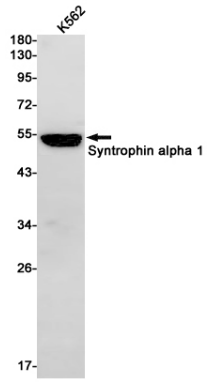
Immunocytochemistry analysis of Syntrophin alpha 1 (green) in U87-MG using Syntrophin alpha 1 antibody,and DAPI(blue).



Immunohistochemistry analysis of paraffin-embedded mouse colon using Syntrophin alpha 1 antibody.High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Western blot analysis of Syntrophin alpha 1 in K562 lysates using Syntrophin alpha 1 antibody



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