

# Goat Anti-Syntrophin (alpha 1) Antibody

Peptide-affinity purified goat antibody Catalog # AF2059a

# **Specification**

# Goat Anti-Syntrophin (alpha 1) Antibody - Product Information

Application WB, E
Primary Accession 013424

Other Accession <u>NP\_003089</u>, <u>6640</u>, <u>20648 (mouse)</u>

Reactivity Human, Mouse, Rat

Predicted Pig, Dog
Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 53895

# Goat Anti-Syntrophin (alpha 1) Antibody - Additional Information

### **Gene ID 6640**

## **Other Names**

Alpha-1-syntrophin, 59 kDa dystrophin-associated protein A1 acidic component 1, Pro-TGF-alpha cytoplasmic domain-interacting protein 1, TACIP1, Syntrophin-1, SNTA1, SNT1

### **Dilution**

WB~~1:1000 E~~N/A

# **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

## Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-Syntrophin (alpha 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-Syntrophin (alpha 1) Antibody - 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**

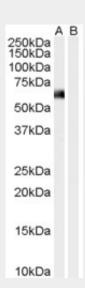
High expression in skeletal muscle and heart. Low expression in brain, pancreas, liver, kidney and lung. Not detected in placenta

# Goat Anti-Syntrophin (alpha 1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

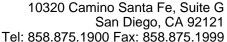
# Goat Anti-Syntrophin (alpha 1) Antibody - Images



AF2059a (0.01  $\mu$ g/ml) staining of Human Muscle lysate (35  $\mu$ g protein in RIPA buffer) with (B) and without (A) blocking with the immunising peptide. Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-Syntrophin (alpha 1) Antibody - Background

Dystrophin is a large, rod-like cytoskeletal protein found at the inner surface of muscle fibers.





Dystrophin is missing in Duchenne Muscular Dystrophy patients and is present in reduced amounts in Becker Muscular Dystrophy patients. The protein encoded by this gene is a peripheral membrane protein found associated with dystrophin and dystrophin-related proteins. This gene is a member of the syntrophin gene family, which contains at least two other structurally-related genes.

# Goat Anti-Syntrophin (alpha 1) Antibody - References

Alpha1-syntrophin mutations identified in sudden infant death syndrome cause an increase in late cardiac sodium current. Cheng J, et al. Circ Arrhythm Electrophysiol, 2009 Dec. PMID 20009079. alpha-1-syntrophin mutation and the long-QT syndrome: a disease of sodium channel disruption. Wu G, et al. Circ Arrhythm Electrophysiol, 2008 Aug. PMID 19684871.

Syntrophin mutation associated with long QT syndrome through activation of the nNOS-SCN5A macromolecular complex. Ueda K, et al. Proc Natl Acad Sci U S A, 2008 Jul 8. PMID 18591664. Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.

Uncovering quantitative protein interaction networks for mouse PDZ domains using protein microarrays. Stiffler MA, et al. J Am Chem Soc, 2006 May 3. PMID 16637659.