

α -Syntrophin (N-19): sc-13757

BACKGROUND

The syntrophins are PDZ-domain-containing proteins that facilitate the recruitment of signaling proteins such as NOS1 to the dystrophin-associated protein complex. The syntrophin family are structurally related proteins that contain multiple protein interaction motifs. Syntrophins associate directly with dystrophin, the product of the Duchenne muscular dystrophy locus, and its homologs. α -Syntrophin has an important role in synapse formation and in the organization of utrophin, acetylcholine receptor and acetylcholinesterase at the neuromuscular synapse. Specifically, NOS1 binds to α -Syntrophin at muscle sarcolemma. β 2-Syntrophin is a modular adapter. In muscle cells, β 2-Syntrophin interacts with members of the dystrophin family, which includes utrophin.

CHROMOSOMAL LOCATION

Genetic locus: SNTA1 (human) mapping to 20q11.21; Snta1 (mouse) mapping to 2 H1.

SOURCE

α -Syntrophin (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of α -Syntrophin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-13757 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

α -Syntrophin (N-19) is recommended for detection of α -Syntrophin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for α -Syntrophin siRNA (h): sc-43435, α -Syntrophin siRNA (m): sc-43436, α -Syntrophin shRNA Plasmid (h): sc-43435-SH, α -Syntrophin shRNA Plasmid (m): sc-43436-SH, α -Syntrophin shRNA (h) Lentiviral Particles: sc-43435-V and α -Syntrophin shRNA (m) Lentiviral Particles: sc-43436-V.

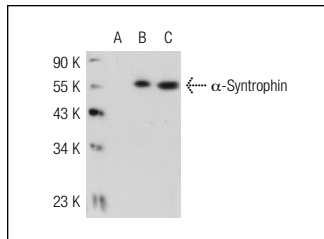
Molecular Weight of α -Syntrophin: 58 kDa.

Positive Controls: α -Syntrophin (h): 293T Lysate: sc-113719, α -Syntrophin (m): 293T Lysate: sc-126356 or rat skeletal muscle extract: sc-364810.

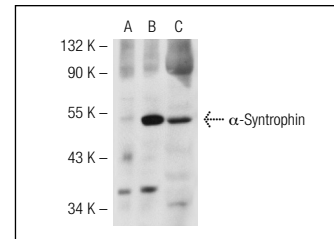
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



α -Syntrophin (N-19): sc-13757. Western blot analysis of α -Syntrophin expression in non-transfected 293T: sc-117752 (A) and human α -Syntrophin transfected 293T: sc-113719 (B) whole cell lysates and rat skeletal muscle tissue extract (C).



α -Syntrophin (N-19): sc-13757. Western blot analysis of α -Syntrophin expression in non-transfected: sc-117752 (A) and mouse α -Syntrophin transfected: sc-126356 (B) 293T whole cell lysates and rat skeletal muscle tissue extract (C).

SELECT PRODUCT CITATIONS

- Pierre, S., et al. 2008. Toponomics analysis of functional interactions of the ubiquitin ligase PAM (protein associated with Myc) during spinal nociceptive processing. *Mol. Cell. Proteomics* 7: 2475-2485.
- González-Ramírez, R., et al. 2008. Nuclear and nuclear envelope localization of dystrophin Dp71 and dystrophin-associated proteins (DAPs) in the C2C12 muscle cells: DAPs nuclear localization is modulated during myogenesis. *J. Cell. Biochem.* 105: 735-745.
- Villarreal-Silva, M., et al. 2009. Dystrophin Dp71 is critical for stability of the DAPs in the nucleus of PC12 cells. *Neurochem. Res.* 35: 366-373.
- Cerecedo, D., et al. 2013. Haemostatic role of intermediate filaments in adhered platelets: Importance of the membranous system stability. *J. Cell. Biochem.* 114: 2050-2060.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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Try **α -Syntrophin (D-7): sc-166634** or **α -Syntrophin (C-7): sc-166207**, our highly recommended monoclonal alternatives to α -Syntrophin (N-19).