SANTA CRUZ BIOTECHNOLOGY, INC.

α-Syntrophin (C-16): sc-13760

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

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 Syntrophins are a family of structurally related proteins that contain multiple protein interaction motifs. Syntrophins associate directly with dystrophin, the product of the Duchenne muscular dystrophy locus, and its homologues. 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. β2-Syntrophin is a modular adapter and in muscle cells 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 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of α-Syntrophin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-13760 P, (100 µg 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.

APPLICATIONS

α-Syntrophin (C-16) 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 µg per 100-500 µg 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).

α-Syntrophin (C-16) is also recommended for detection of α-Syntrophin in additional species, including equine, canine, bovine and porcine.

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.

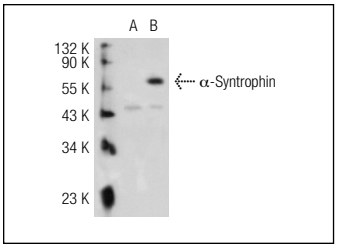
Molecular Weight of α-Syntrophin: 58 kDa.

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

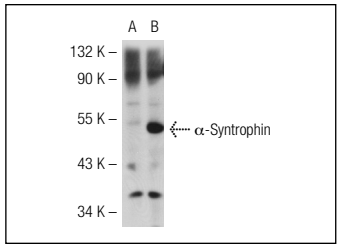
RECOMMENDED SECONDARY REAGENTS

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 (C-16): sc-13760. Western blot analysis of α-Syntrophin expression in non-transfected: sc-117752 (**A**) and human α-Syntrophin transfected: sc-113719 (**B**) 293T whole cell lysates.



α-Syntrophin (C-16): sc-13760. 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.

SELECT PRODUCT CITATIONS

1. Piitulainen, H., et al. 2008. Molecular adaptations of voltage-gated sodium ion channel related proteins after fatiguing stretch-shortening cycle exercise. Scand. J. Med. Sci. Sports 4: 53.

RESEARCH USE

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

PROTOCOLS

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