SANTA CRUZ BIOTECHNOLOGY, INC.

Arp-T2 (S-14): sc-104075

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The Power to Question

BACKGROUND

Actin-related proteins are classified into Arp subclasses according to their amino acid sequence similarity to Actin. Both Arps and Actin proteins have an ATPase domain, which catalyzes the decomposition of adenosine triphosphate (ATP) into adenosine diphosphate (ADP) and a free phosphate ion to release energy. Arp-T2 (Actin-related protein T2), also known as Arp-M2, is a 377-amino acid structural cytoskeleton protein. Like other Arp family members, Arp-T2 contains an Actin-like ATP/ADP-binding pocket and two nuclear export signals. Although Arp-T2 shares 43% sequence identity with β-Actin, it contains several cysteine residues that are not found in other Actin family members. With significant expression in testis, Arp-T2 may play a role in spermatid formation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Actrt2 (mouse) mapping to 4 E2.

SOURCE

Arp-T2 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Arp-T2 of mouse 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-104075 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Arp-T2 (S-14) is recommended for detection of Arp-T2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Arp-T2 siRNA (m): sc-105091, Arp-T2 shRNA Plasmid (m): sc-105091-SH and Arp-T2 shRNA (m) Lentiviral Particles: sc-105091-V.

Molecular Weight (predicted) of Arp-T2: 42 kDa.

Molecular Weight (observed) of Arp-T2: 37/43 kDa.

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) 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.

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.

PROTOCOLS

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