SANTA CRUZ BIOTECHNOLOGY, INC.

Septin 5 (49): sc-136430

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The septins are a family of GTPase enzymes, some of which are required for cytokinesis and others of which are associated with exocytosis. Members of the septin family can form heteropolymer complexes and also play a role in the organization of new growth in organisms. The transcriptional regulation of all septins is complex, resulting in alternatively spliced variants. At least three septins (Septin 1, 2 and 4) are associated with a Tau-based paired helical filament core and may contribute to the formation of neurofibrillary tangle as integral constituents of paired helical filaments. The human SEPT4 (H5/PNUTL2/CDCREL-2) gene encodes ARTS (for apoptosis-related protein in the TGFβ signaling pathway), which is expressed in many cells and acts to enhance cell death induced by TGFβ or, to a lesser extent, by other apoptotic agents. ARTS is localized to mitochondria and translocates to the nucleus when apoptosis occurs. Septin 5 is a major form of the CDCREL-1 septin in the adult neocortex of mammals.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SEPT5 (human) mapping to 22q11.21; Sept5 (mouse) mapping to 16 A3.

RESEARCH USE

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

SOURCE

Septin 5 (49) is a mouse monoclonal antibody raised against amino acids 209-220 of Septin 5 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Septin 5 (49) is recommended for detection of Septin 5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Septin 5 siRNA (h): sc-36478, Septin 5 siRNA (m): sc-36479, Septin 5 shRNA Plasmid (h): sc-36478-SH, Septin 5 shRNA Plasmid (m): sc-36479-SH, Septin 5 shRNA (h) Lentiviral Particles: sc-36478-V and Septin 5 shRNA (m) Lentiviral Particles: sc-36479-V.

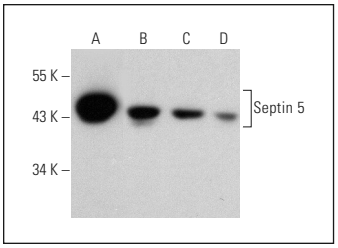
Molecular Weight of Septin 5: 40 kDa.

Positive Controls: rat brain extract: sc-2392, rat cerebellum extract: sc-2398 or Neuro-2A whole cell lysate: sc-364185.

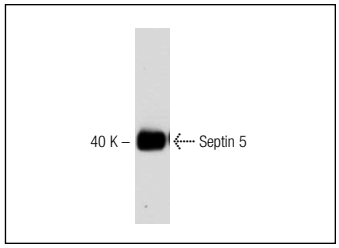
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



Septin 5 (49): sc-136430. Western blot analysis of Septin 5 expression in rat brain tissue extract (**A**) and Neuro-2A (**B**), 3T3-L1 (**C**) and NRK (**D**) whole cell lysates.



Septin 5 (49): sc-136430. Western blot analysis of Septin 5 expression in rat cerebrum tissue extract.

STORAGE

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