

Septin 9 (C-25): sc-130263

BACKGROUND

Septins are members of a conserved family of cytoskeletal GTPases, specifically belonging to the large superclass of P-loop GTPases. Septin proteins form homo- and hetero-oligomeric polymers that accumulate into higher-order filaments which may function as dynamic protein scaffolds. Septins play an important role in vesicle trafficking, apoptosis, cytoskeleton remodeling, infection, neurodegeneration, neoplasia and cytokinesis. Septin 9 is expressed in lymphoid tissues and has an elaborate genomic structure. There are 15 different isoforms of Septin 9, made possible by intermixing 5 alternate amino-termini and three alternate carboxy-termini. Changes in the levels of Septin 9 by overexpression of these individual isoforms can disturb cellular behavior and may be implicated in neoplasia. Septin 9 is commonly upregulated in ovarian tumors and may be linked to hereditary neuralgic amyotrophy (HNA). HNA is an autosomal dominant, recurrent neuropathy affecting the brachial plexus.

REFERENCES

- Burrows, J.F., et al. 2003. Altered expression of the septin gene, SEPT9, in ovarian neoplasia. *J. Pathol.* 201: 581-588.
- Kim, D.S., et al. 2004. Analysis of mammalian septin expression in human malignant brain tumors. *Neoplasia* 6: 168-178.

CHROMOSOMAL LOCATION

Genetic locus: SEPT9 (human) mapping to 17q25.2; Sept9 (mouse) mapping to 11 E2.

SOURCE

Septin 9 (C-25) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of Septin 9 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Septin 9 (C-25) is recommended for detection of Septin 9 of mouse 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), immunohistochemistry (including paraffin-embedded sections) (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 Septin 9 siRNA (h): sc-61532, Septin 9 shRNA Plasmid (h): sc-61532-SH and Septin 9 shRNA (h) Lentiviral Particles: sc-61532-V.

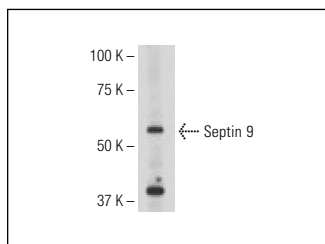
Molecular Weight of Septin 9: 65 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

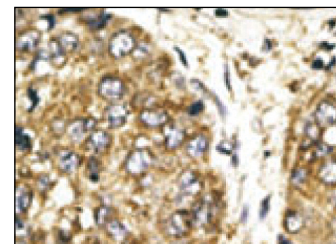
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Septin 9 (C-25): sc-130263. Western blot analysis of Septin 9 expression in Jurkat whole cell lysate.



Septin 9 (C-25): sc-130263. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Froidevaux-Klipfel, L., et al. 2011. Modulation of septin and molecular motor recruitment in the microtubule environment of the Taxol-resistant human breast cancer cell line MDA-MB-231. *Proteomics* 11: 3877-3886.
- Parakalan, R., et al. 2012. Transcriptome analysis of amoeboid and ramified microglia isolated from the corpus callosum of rat brain. *BMC Neurosci.* 13: 64.

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.



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Try **Septin 9 (2C6): sc-293291**, our highly recommended monoclonal alternative to Septin 9 (C-25).