

# Septin 11 (N-12): sc-48306

## 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 11 is mainly present in brain tissue. It has been found to dominantly co-localize with microtubules and Actin stress fibers in HMEC cells and REF52 cells, and to partially co-localize with microtubules and stress fibers in HeLa cells. SEPT11 (the gene encoding Septin 11) is confined to the same tissues as those that express SEPT5, suggesting that SEPT11 and SEPT5 are components of a cell-specific septin complex.

## REFERENCES

- Hall, P.A. and Russell, S.E. 2004. The pathobiology of the septin gene family. *J. Pathol.* 204: 489-505.
- Hanai, N., et al. 2004. Biochemical and cell biological characterization of a mammalian septin, SEPT 11. *FEBS Lett.* 568: 83-88.
- Kim, D.S., et al. 2004. Analysis of mammalian septin expression in human malignant brain tumors. *Neoplasia* 6: 168-178.
- Martinez, C. and Ware, J. 2004. Mammalian septin function in hemostasis and beyond. *Exp. Biol. Med.* 229: 1111-1119.
- Nagata, K., et al. 2004. Biochemical and cell biological analyses of a mammalian septin complex, SEPT7/9b/11. *J. Biol. Chem.* 279: 55895-55904.
- Hall, P.A., et al. 2005. Expression profiling the human septin gene family. *J. Pathol.* 206: 269-278.
- Russell, S.E. and Hall, P.A. 2005. Do septins have a role in cancer? *Br. J. Cancer* 93: 499-503.
- Cerveira, N., et al. 2006. SEPT2 is a new fusion partner of MLL in acute myeloid leukemia with t(2;11)(q37;q23). *Oncogene* 25: 6147-6152
- Bläser, S., et al. 2006. Human endothelial cell septins: SEPT11 is an interaction partner of SEPT5. *J. Pathol.* 210: 103-110.

## CHROMOSOMAL LOCATION

Genetic locus: SEPT11 (human) mapping to 4q21.1; Sept11 (mouse) mapping to 5 E2.

## SOURCE

Septin 11 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Septin 11 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, 48306 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Septin 11 (N-12) is recommended for detection of Septin 11 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Septin 11 (N-12) is also recommended for detection of Septin 11 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Septin 11 siRNA (h): sc-61534, Septin 11 siRNA (m): sc-61535, Septin 11 shRNA Plasmid (h): sc-61534-SH, Septin 11 shRNA Plasmid (m): sc-61535-SH, Septin 11 shRNA (h) Lentiviral Particles: sc-61534-V and Septin 11 shRNA (m) Lentiviral Particles: sc-61535-V.

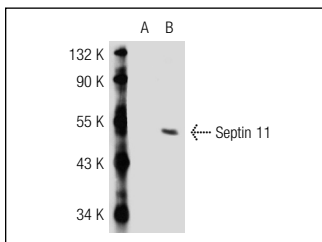
Molecular Weight of Septin 11: 49.4 kDa.

Positive Controls: Septin 11 (h): 293T Lysate: sc-116662 or LADMAC whole cell lysate: sc-364189.

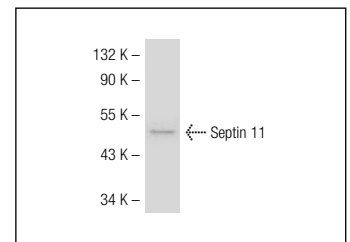
## RECOMMENDED SECONDARY REAGENTS

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



Septin 11 (N-12): sc-48306. Western blot analysis of Septin 11 expression in non-transfected: sc-117752 (A) and human Septin 11 transfected: sc-116662 (B) 293T whole cell lysates.



Septin 11 (N-12): sc-48306. Western blot analysis of Septin 11 expression in LADMAC whole cell lysate.

## 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.