

# Septin 8 (H-58): sc-134891

## 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 8 is a 508 amino acid protein that is expressed in the brain, cardiovascular regions, prostate, testis and ovary. Septin 8 interacts with both Septin 5 and cell division cycle related-1 (CDCrel-1). Septin 8 may play an important role in the functional regulation of hPFTAIRE1, a member of the Cdc2-related kinase family that is localized in cytoplasm. Septin 8, Septin 4 and Septin 5 surround  $\alpha$ -granules, implicating these three septins as components of the septin complex in platelets and contributing to platelet biology.

## REFERENCES

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- Nagata, K., et al. 2004. Biochemical and cell biological analyses of a mammalian septin complex, Septin 7/9b/11. *J. Biol. Chem.* 279: 55895-55904.
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## CHROMOSOMAL LOCATION

Genetic locus: SEPT8 (human) mapping to 5q31.1; Sept8 (mouse) mapping to 11 B1.3.

## SOURCE

Septin 8 (H-58) is a rabbit polyclonal antibody raised against amino acids 426-483 mapping at the C-terminus of Septin 8 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Septin 8 (H-58) is recommended for detection of Septin 8 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 8 (H-58) is also recommended for detection of Septin 8 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Septin 8 siRNA (h): sc-61530, Septin 8 siRNA (m): sc-61531, Septin 8 shRNA Plasmid (h): sc-61530-SH, Septin 8 shRNA Plasmid (m): sc-61531-SH, Septin 8 shRNA (h) Lentiviral Particles: sc-61530-V and Septin 8 shRNA (m) Lentiviral Particles: sc-61531-V.

Molecular Weight of Septin 8: 50 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

## 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.