# SANTA CRUZ BIOTECHNOLOGY, INC.

# Septin 8 (D-7): sc-390105



#### 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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- Sudbery, P.E. 2001. The germ tubes of *Candida albicans* hyphae and pseudohyphae show different patterns of septin ring localization. Mol. Microbiol. 41: 19-31.
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- 4. Castillon, G.A., et al. 2003. Septins have a dual role in controlling mitotic exit in budding yeast. Curr. Biol. 13: 654-658.
- Longtine, M.S. and Bi, E. 2003. Regulation of septin organization and function in yeast. Trends Cell Biol. 13: 403-409.
- Bläser, S., et al. 2004. The novel human platelet septin Septin 8 is an interaction partner of Septin 4. Thromb. Haemost. 91: 959-966.
- 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.
- Hall, P.A., et al. 2005. Expression profiling the human septin gene family. J. Pathol. 206: 269-278.

#### **CHROMOSOMAL LOCATION**

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

### SOURCE

Septin 8 (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 271-305 within an internal region of Septin 8 of human origin.

# **STORAGE**

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

#### PRODUCT

Each vial contains 200  $\mu g$   $IgG_{2a}$  kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390105 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

#### **APPLICATIONS**

Septin 8 (D-7) is recommended for detection of Septin 8 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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).

Septin 8 (D-7) is also recommended for detection of Septin 8 in additional species, including equine, canine, bovine 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: HeLa whole cell lysate: sc-2200, HEL 92.1.7 cell lysate: sc-2270 or SK-N-SH cell lysate: sc-2410.

#### DATA





Septin 8 (D-7): sc-390105. Western blot analysis of Septin 8 expression in HeLa (A), SJRH30 (B), SK-N-SH (C), SH-SY5Y (D), HEL 92.1.7 (E) and F9 (F) whole cell lysates. Septin 8 (D-7): sc-390105. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells.

#### SELECT PRODUCT CITATIONS

- Hosono, M., et al. 2016. Interaction of Ca<sup>2+</sup>-dependent activator protein for secretion 1 (CAPS1) with septin family proteins in mouse brain. Neurosci. Lett. 617: 232-235.
- Banko, M., et al. 2019. A homozygous genome-edited Sept2-EGFP fibroblast cell line. Cytoskeleton 76: 73-82.

### **RESEARCH USE**

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