

Septin 8 (D-11): sc-515096

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 α -granules, implicating these three septins as components of the septin complex in platelets and contributing to platelet biology.

REFERENCES

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- Castillon, G.A., et al. 2003. Septins have a dual role in controlling mitotic exit in budding yeast. *Curr. Biol.* 13: 654-658.
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- 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-11) is a mouse monoclonal antibody raised against amino acids 426-483 mapping at the C-terminus of Septin 8 of human origin.

PRODUCT

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

APPLICATIONS

Septin 8 (D-11) 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 μ g per 100-500 μ 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).

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.

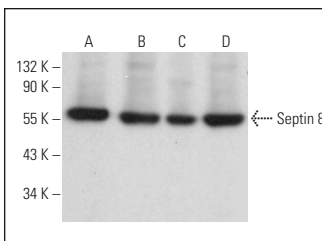
Molecular Weight of Septin 8: 50 kDa.

Positive Controls: human brain hippocampus extract: sc-364375, mouse brain extract: sc-2253 or rat brain extract: sc-2392.

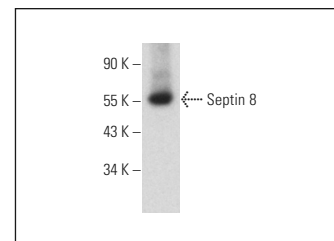
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Septin 8 (D-11): sc-515096. Western blot analysis of Septin 8 expression in human cerebral cortex (A), mouse brain (B), rat brain (C) and rat hippocampus (D) tissue extracts.



Septin 8 (D-11): sc-515096. Western blot analysis of Septin 8 expression in human hippocampus tissue extract.

SELECT PRODUCT CITATIONS

- Yuan, Y., et al. 2018. Cell type-specific CLIP reveals that NOVA regulates cytoskeleton interactions in motoneurons. *Genome Biol.* 19: 117.

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.