

Septin 8 (N-15): sc-48937

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.

CHROMOSOMAL LOCATION

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

SOURCE

Septin 8 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Septin 8 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-48937 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Septin 8 (N-15) is recommended for detection of Septin 8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), 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 (N-15) is also recommended for detection of Septin 8 in additional species, including 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.

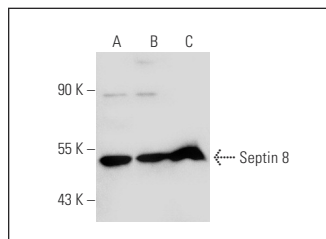
Molecular Weight of Septin 8: 50 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Septin 8 (h): 293 Lysate: sc-110604 or HeLa whole cell lysate: sc-2200.

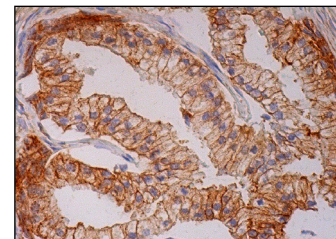
STORAGE

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

DATA



Septin 8 (N-15): sc-48937. Western blot analysis of Septin 8 expression in non-transfected 293T: sc-117752 (A), human Septin 8 transfected 293T: sc-110604 (B) and HeLa (C) whole cell lysates.



Septin 8 (N-15): sc-48937. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing membrane and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Li, L., et al. 2011. Proteins linked to extinction in contextual fear conditioning in the C57BL/6J mouse. *Proteomics* 11: 3706-3724.
- 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.
- Menon, M.B., et al. 2014. Genetic deletion of SEPT7 reveals a cell type-specific role of septins in microtubule destabilization for the completion of cytokinesis. *PLoS Genet.* 10: e1004558.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Septin 8 (C-5): sc-390074** or **Septin 8 (D-7): sc-390105**, our highly recommended monoclonal alternatives to Septin 8 (N-15).