

SEPT4 / Septin 4 Antibody (Internal)
Goat Polyclonal Antibody
Catalog # ALS15388**Specification**

SEPT4 / Septin 4 Antibody (Internal) - Product Information

Application	WB, IHC
Primary Accession	O43236
Reactivity	Human, Rat, Rabbit, Zebrafish, Hamster, Pig, Horse, Xenopus, Dog
Host	Goat
Clonality	Polyclonal
Calculated MW	55kDa KDa

SEPT4 / Septin 4 Antibody (Internal) - Additional Information**Gene ID** 5414**Other Names**

Septin-4, Apoptosis-related protein in the TGF-beta signaling pathway, ARTS, Bradeion beta, Brain protein H5, CE5B3 beta, Cell division control-related protein 2, hCDCREL-2, Cerebral protein 7, Peanut-like protein 2, SEPT4, ARTS, PNUTL2, SEP4

Target/Specificity

Human SEPT4 / Septin 4. This antibody is expected to recognize isoform 1 (NP_004565.1), 3 (NP_536341.1) and 4 (NP_001185642.1). Amino acid numbering in name refers to NP_004565.1 sequence.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

SEPT4 / Septin 4 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

SEPT4 / Septin 4 Antibody (Internal) - Protein Information**Name** SEPTIN4 ([HGNC:9165](#))**Function**

Filament-forming cytoskeletal GTPase (Probable). Pro- apoptotic protein involved in LGR5-positive intestinal stem cell and Paneth cell expansion in the intestines, via its interaction with XIAP (By similarity). May also play a role in the regulation of cell fate in the intestine (By similarity). Positive regulator of apoptosis involved in hematopoietic stem cell homeostasis; via its interaction with XIAP (By similarity). Negative regulator of repair and hair follicle regeneration in response to injury, due to inhibition of hair follicle stem cell proliferation, potentially via its interaction with XIAP (By similarity). Plays an important role in male fertility and sperm motility (By similarity). During spermiogenesis, essential for the establishment of the annulus (a fibrous ring structure connecting

the midpiece and the principal piece of the sperm flagellum) which is a requisite for the structural and mechanical integrity of the sperm (By similarity). Involved in the migration of cortical neurons and the formation of neuron leading processes during embryonic development (By similarity). Required for dopaminergic metabolism in presynaptic autoreceptors; potentially via activity as a presynaptic scaffold protein (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P28661}. Cell projection, cilium, flagellum Cytoplasmic vesicle, secretory vesicle Cell projection, axon {ECO:0000250|UniProtKB:P28661}. Cell projection, dendrite {ECO:0000250|UniProtKB:P28661}. Perikaryon {ECO:0000250|UniProtKB:P28661}. Synapse Note=In platelets, found in areas surrounding alpha-granules (PubMed:15116257). Found in the sperm annulus, a fibrous ring structure connecting the midpiece and the principal piece of the sperm flagellum (PubMed:25588830). Expressed and colocalized with SLC6A3 and SNCA in axon terminals, especially at the varicosities (By similarity) {ECO:0000250|UniProtKB:P28661, ECO:0000269|PubMed:15116257, ECO:0000269|PubMed:25588830}

Tissue Location

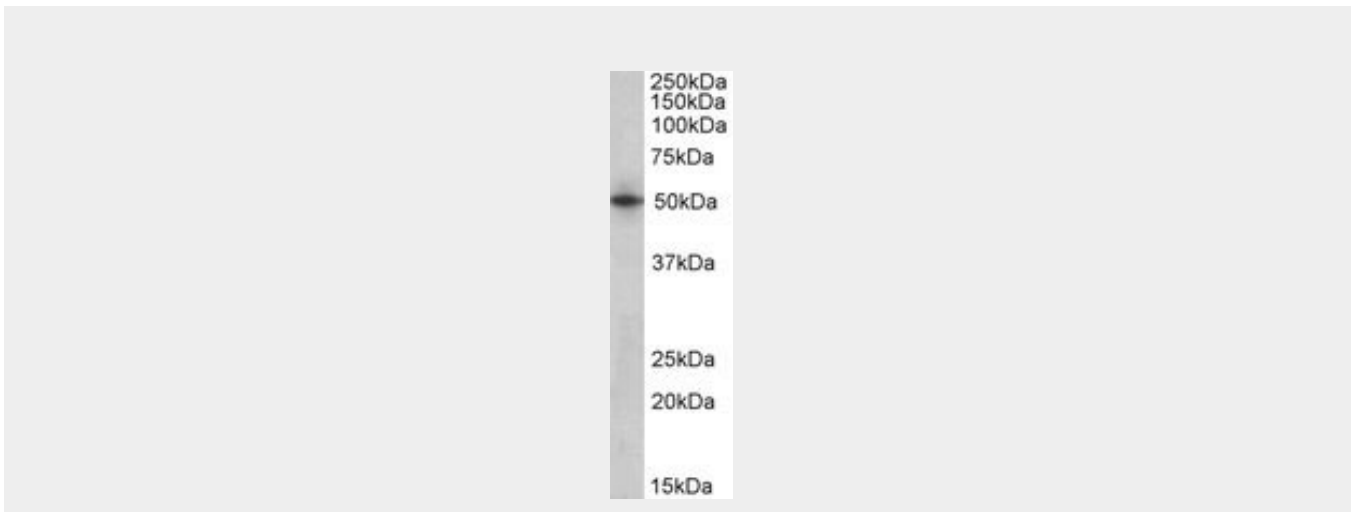
Widely expressed in adult and fetal tissues with highest expression in adult brain (at protein level), heart, liver and adrenal gland and fetal heart, kidney, liver and lung. Expressed in presynaptic terminals of dopaminergic neurons projecting from the substantia nigra pars compacta to the striatum (at protein level) (PubMed:17296554). Expressed in axonal varicosities in dopaminergic nerve terminals (at protein level) (PubMed:17296554). Expressed in the putamen and in the adjacent cerebral cortex (at protein level) (PubMed:17296554). Expressed in colonic crypts (at protein level) (PubMed:30389919). Also expressed in colorectal cancers and malignant melanomas. Expressed in platelets.

SEPT4 / Septin 4 Antibody (Internal) - Protocols

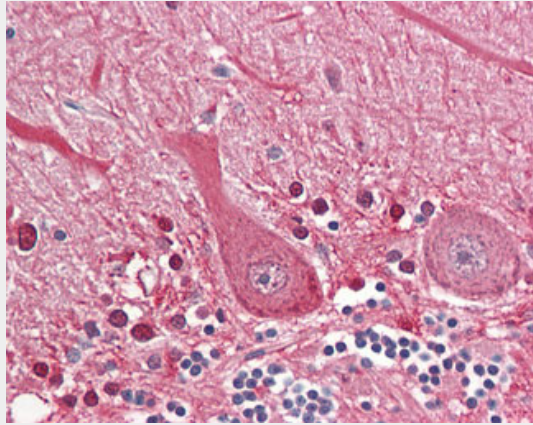
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SEPT4 / Septin 4 Antibody (Internal) - Images



SEPT4 antibody (1 ug/ml) staining of Human Heart lysate (35 ug protein/ml in RIPA buffer).



Anti-SEPT4 / Septin-4 antibody IHC of human brain, cerebellum.

SEPT4 / Septin 4 Antibody (Internal) - Background

Filament-forming cytoskeletal GTPase (By similarity). May play a role in cytokinesis (Potential). May play a role in platelet secretion. Isoform ARTS, but not the other isoforms, is required for the induction of cell death mediated by TGF-beta and by other apoptotic stimuli.

SEPT4 / Septin 4 Antibody (Internal) - References

- Paavola P., et al. *Genomics* 55:122-125(1999).
- Zieger B., et al. *Gene* 261:197-203(2000).
- Larisch S., et al. *Nat. Cell Biol.* 2:915-921(2000).
- Tanaka M., et al. *Biochem. Biophys. Res. Commun.* 286:547-553(2001).
- Yoshimoto M., et al. Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.