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SEPT2 / Septin 2 Antibody (N-Terminus)

Goat Polyclonal Antibody
Catalog # ALS12865

Specification

SEPT2 / Septin 2 Antibody (N-Terminus) - Product Information

Application	**WB, IHC**
Primary Accession	Q15019
Reactivity	**Human, Mouse, Rat, Rabbit**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**41kDa KDa**

SEPT2 / Septin 2 Antibody (N-Terminus) - Additional Information

Gene ID 4735

Other Names
Septin-2, Neural precursor cell expressed developmentally down-regulated protein 5, NEDD-5, SEPT2, DIFF6, KIAA0158, NEDD5

Target/Specificity
Human SEPT2 / Septin 2. Reported variants represent identical protein: NP_001008492.1, NP_006146.1, NP_004395.1, NP_001008491.1.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
SEPT2 / Septin 2 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

SEPT2 / Septin 2 Antibody (N-Terminus) - Protein Information

Name SEPTIN2 (HGNC:7729)

Function
Filament-forming cytoskeletal GTPase. Forms a filamentous structure with SEPTIN12, SEPTIN6, SEPTIN2 and probably SEPTIN4 at the sperm annulus which is required for the structural integrity and motility of the sperm tail during postmeiotic differentiation (PubMed:25588830). Required for normal organization of the actin cytoskeleton. Plays a role in the biogenesis of polarized columnar-shaped epithelium by maintaining polyglutamylated microtubules, thus facilitating efficient vesicle transport, and by impeding MAP4 binding to tubulin. Required for the progression through mitosis. Forms a scaffold at the midplane of the mitotic splindle required to maintain CENPE localization at kinetochores and consequently chromosome congression. During anaphase, may be required for chromosome segregation and spindle elongation. Plays a role in ciliogenesis and collective cell movements. In cilia, required for the integrity of the diffusion barrier at the base of the primary

cilium that prevents diffusion of transmembrane proteins between the cilia and plasma membranes: probably acts by regulating the assembly of the tectonic- like complex (also named B9 complex) by localizing TMEM231 protein. May play a role in the internalization of 2 intracellular microbial pathogens, Listeria monocytogenes and Shigella flexneri.

Cellular Location
Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, spindle. Chromosome, centromere, kinetochore. Cleavage furrow. Midbody Cytoplasm, cell cortex. Cell projection, cilium membrane. Cell projection, cilium, flagellum. Note=In metaphase cells, localized within the microtubule spindle. At the metaphase plate, in close apposition to the kinetochores of the congressed chromosomes. In cells undergoing cytokinesis, localized to the midbody, the ingressing cleavage furrow, and the central spindle. During bacterial infection, displays a collar shape structure next to actin at the pole of invading bacteria. In epithelial cells, colocalizes with polyglutamylated tubulin around the trans-Golgi network, as well as juxatnuclear and proximal Golgi apparatus. Localizes at the base of the cilia near the morphological distinction between the cilia and plasma membranes. Found in the sperm annulus (PubMed:25588830).

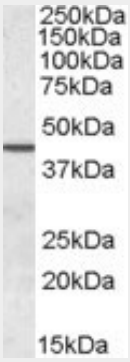
Tissue Location
Widely expressed. Up-regulated in liver cancer.

SEPT2 / Septin 2 Antibody (N-Terminus) - Protocols

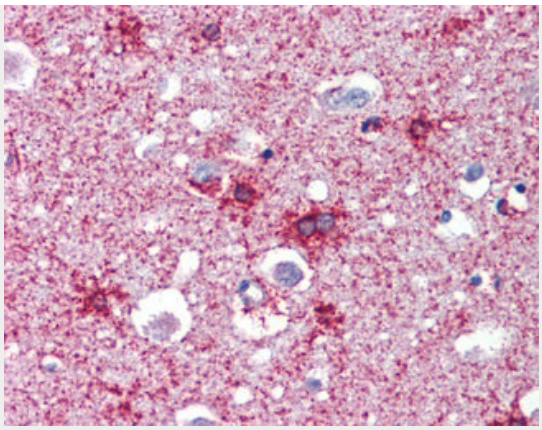
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

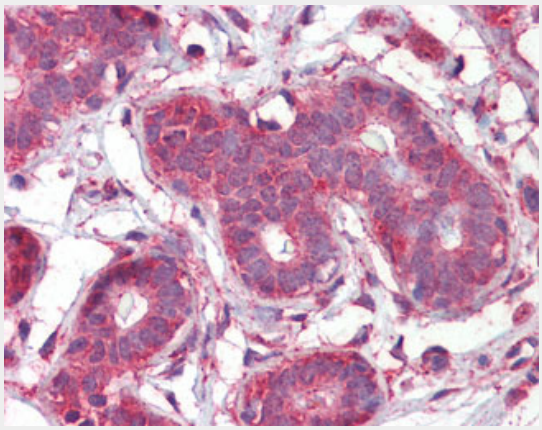
SEPT2 / Septin 2 Antibody (N-Terminus) - Images



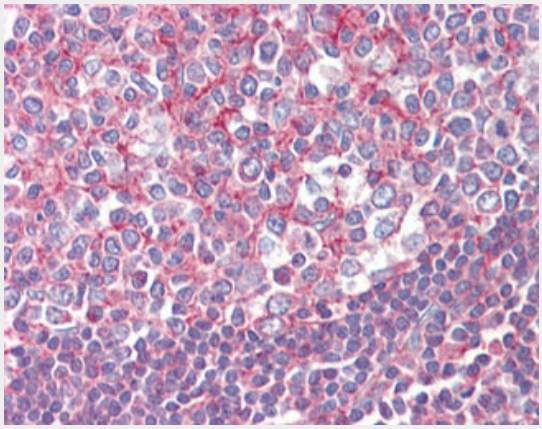
Antibody (0.05 ug/ml) staining of Human Testis lysate (35 ug protein in RIPA buffer).



Anti-SEPT2 / Septin 2 antibody IHC of human brain, cortex.



Anti-SEPT2 / Septin 2 antibody IHC of human breast.



Anti-SEPT2 / Septin 2 antibody IHC of human tonsil.

SEPT2 / Septin 2 Antibody (N-Terminus) - Background

Filament-forming cytoskeletal GTPase. Required for normal organization of the actin cytoskeleton. Plays a role in the biogenesis of polarized columnar-shaped epithelium by maintaining polyglutamylated microtubules, thus facilitating efficient vesicle transport, and by impeding MAP4 binding to tubulin. Required for the progression through mitosis. Forms a scaffold at the midplane of the mitotic splindle required to maintain CENPE localization at kinetochores and consequently chromosome congression. During anaphase, may be required for chromosome segregation and spindle elongation. Plays a role in ciliogenesis and collective cell movements. In cilia, required for the integrity of the diffusion barrier at the base of the primary cilium that prevents diffusion of

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SEPT2 / Septin 2 Antibody (N-Terminus) - References

Nagase T.,et al.DNA Res. 2:167-174(1995).
Mori T.,et al.Cytogenet. Cell Genet. 73:224-227(1996).
Hu G.,et al.Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).