

**Goat Anti-SEPT2 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1969a****Specification**

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**Goat Anti-SEPT2 Antibody - Product Information**

Application	WB, IHC, Pep-ELISA
Primary Accession	<a href="#">Q15019</a>
Other Accession	<a href="#">NP_001008491</a> , <a href="#">4735</a> , <a href="#">18000 (mouse)</a> , <a href="#">117515 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	41487

**Goat Anti-SEPT2 Antibody - Additional Information****Gene ID** 4735**Other Names**

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

**Dilution**WB~~1:1000  
IHC~~1:100~500  
Pep-ELISA~~N/A**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-SEPT2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-SEPT2 Antibody - 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:<a href="http://www.uniprot.org/citations/25588830" target="\_blank">25588830</a>). 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 spindle 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 juxtanuclear 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).

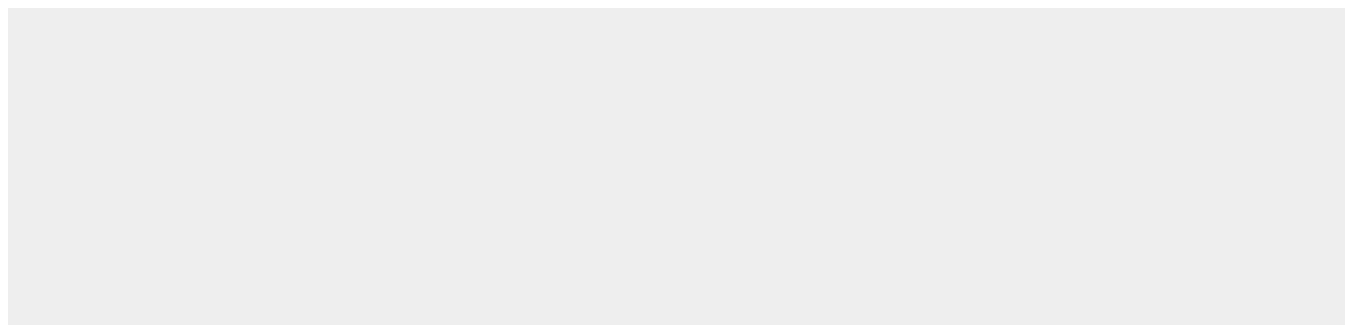
**Tissue Location**

Widely expressed. Up-regulated in liver cancer.

**Goat Anti-SEPT2 Antibody - 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](#)

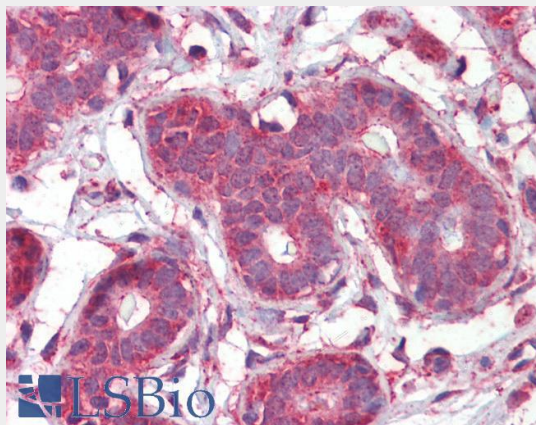
**Goat Anti-SEPT2 Antibody - Images**



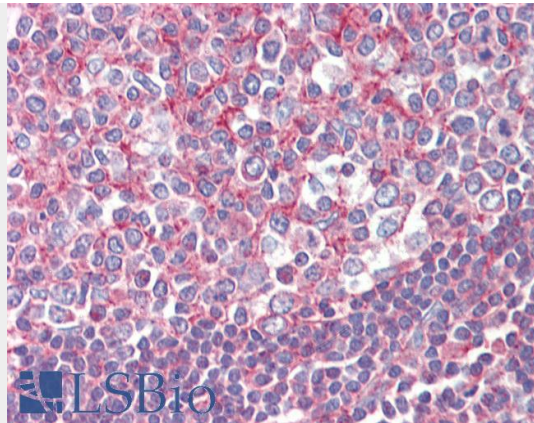
AF1969a (0.05 µg/ml) staining of Human Testis lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



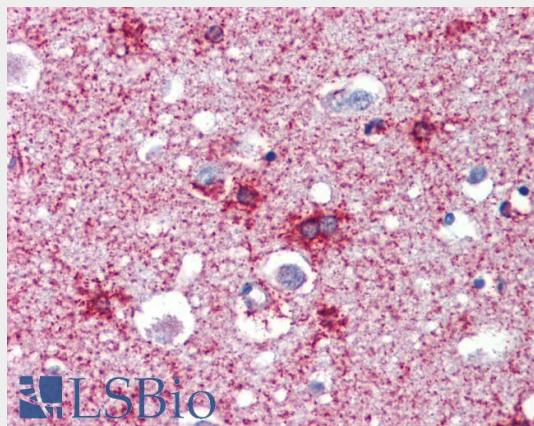
EB08931 (0.05µg/ml) staining of Human Testis lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB08931 (2.5µg/ml) staining of paraffin embedded Human Breast. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB08931 (2.5µg/ml) staining of paraffin embedded Human Tonsil. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



EB08931 (2.5µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

#### **Goat Anti-SEPT2 Antibody - References**

Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Genetic susceptibility to distinct bladder cancer subphenotypes. Guey LT, et al. Eur Urol, 2010 Feb. PMID 19692168.

PTEN identified as important risk factor of chronic obstructive pulmonary disease. Hosgood HD 3rd, et al. Respir Med, 2009 Dec. PMID 19625176.

Septin 11 restricts InlB-mediated invasion by Listeria. Mostowy S, et al. J Biol Chem, 2009 Apr 24. PMID 19234302.

Polymorphisms in innate immunity genes and lung cancer risk in Xuanwei, China. Shen M, et al. Environ Mol Mutagen, 2009 May. PMID 19170196.