

Goat Anti-SEPT2 Antibody

Peptide-affinity purified goat antibody Catalog # AF1969a

Specification

Goat Anti-SEPT2 Antibody - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, IHC <u>Q15019</u> <u>NP_001008491</u>, <u>4735</u>, <u>18000 (mouse)</u>, <u>117515</u> (rat) Human Mouse, Rat, Cow Goat Polyclonal 100ug/200ul IgG 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

Format

0.5 mg lgG/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:25588830). Required for



normal organization of the actin cytoskeleton. Plays a role in the biogenesis of polarized columnarshaped 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.

Goat Anti-SEPT2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-SEPT2 Antibody - Images

250kDa 150kDa 100kDa 75kDa
50kDa
37kDa
25kDa
20kDa
15kDa

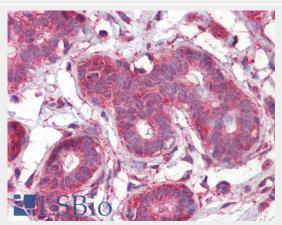
AF1969a (0.05 µg/ml) staining of Human Testis lysate (35 µg protein in RIPA buffer). Primary



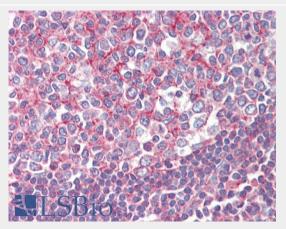
incubation was 1 hour. Detected by chemiluminescence.



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

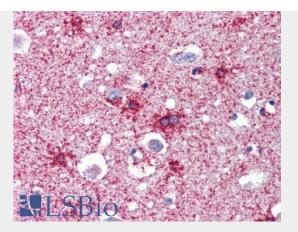


EB08931 (2.5µg/ml) staining of paraffin embedded Human Breast. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



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 InIB-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.