

SEPT2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16761b**Specification**

SEPT2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q15019](#)**SEPT2 Antibody (C-term) Blocking Peptide - 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

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SEPT2 Antibody (C-term) Blocking Peptide - 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 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.

SEPT2 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SEPT2 Antibody (C-term) Blocking Peptide - Images**SEPT2 Antibody (C-term) Blocking Peptide - 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 spindle required to maintain CENPE localization at kinetochores and consequently chromosome congression. During anaphase, may be required for chromosome segregation and spindle elongation. May play a role in the internalization of 2 intracellular microbial pathogens, *Listeria monocytogenes* and *Shigella flexneri*.

SEPT2 Antibody (C-term) Blocking Peptide - References

Martins-de-Souza, D., et al. J Psychiatr Res (2010) In press :Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)Hosgood, H.D. III, et al. Respir Med 103(12):1866-1870(2009)Shen, M., et al. Environ. Mol. Mutagen. 50(4):285-290(2009)Mostowy, S., et al. J. Biol. Chem. 284(17):11613-11621(2009)