

# **Anti-Septin 2 Antibody**

Rabbit polyclonal antibody to Septin 2 Catalog # AP61343

## **Specification**

# **Anti-Septin 2 Antibody - Product Information**

Application WB
Primary Accession Q15019
Other Accession P42208

Reactivity Human, Mouse, Rat, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 41487

# **Anti-Septin 2 Antibody - Additional Information**

**Gene ID 4735** 

**Other Names** 

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

**Target/Specificity** 

Recognizes endogenous levels of Septin 2 protein.

**Dilution** 

WB~~WB (1/500 - 1/1000)

#### **Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### **Anti-Septin 2 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 splindle required to maintain CENPE localization at



Tel: 858.875.1900 Fax: 858.875.1999

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**

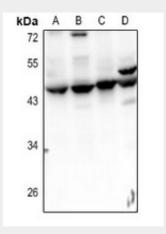
Widely expressed. Up-regulated in liver cancer.

## **Anti-Septin 2 Antibody - Protocols**

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

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

# **Anti-Septin 2 Antibody - Images**



Western blot analysis of Septin 2 expression in HepG2 (A), HEK293T (B), PC12 (C), AML12 (D) whole cell lysates.





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# **Anti-Septin 2 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Septin 2. The exact sequence is proprietary.