




Product datasheet

Anti-Septin 2 antibody ab224410

6 Images

Overview

Product name	Anti-Septin 2 antibody
Description	Rabbit polyclonal to Septin 2
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Cow, Orangutan 
Immunogen	Recombinant fragment corresponding to Human Septin 2 aa 250 to the C-terminus. Database link: Q15019  Run BLAST with  Run BLAST with
Positive control	IHC-P: Human cerebral cortex and testis tissue WB: HepG2, NIH/3T3 and NBT-II cell lysates. ICC/IF: U-2 OS cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab224410 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 41 kDa.
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.

Target

Function

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. 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*.

Tissue specificity

Widely expressed. Up-regulated in liver cancer.

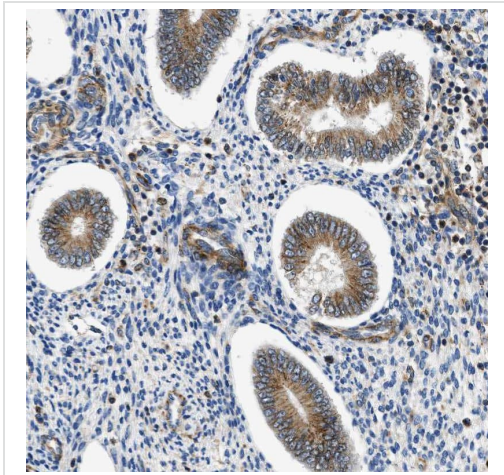
Sequence similarities

Belongs to the TRAFAC class TrmE-Era-EngA-EngB-Septin-like GTPase superfamily. Septin GTPase family.
Contains 1 septin-type G (guanine nucleotide-binding) domain.

Cellular localization

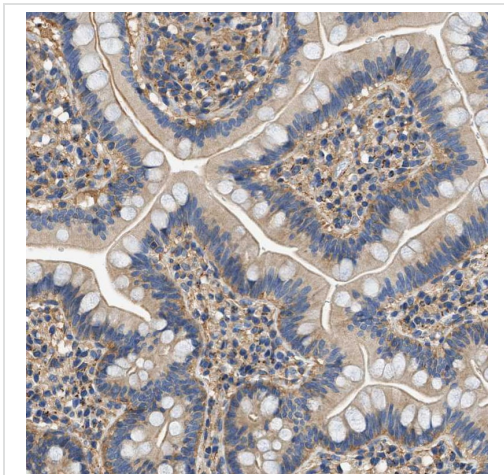
Cytoplasm. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, spindle. Chromosome, centromere, kinetochore. Cleavage furrow. Midbody. Cytoplasm, cell cortex. Cell projection, cilium membrane. In metaphase cells, localized within the microtubule spindle. At the metaphase plate, in close apposition to the 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.

Images



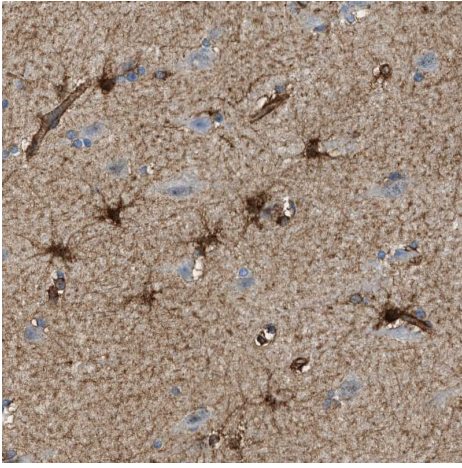
Paraffin-embedded human endometrium stained for Septin2 using ab224410 at 1/200 dilution in immunohistochemical analysis. Shows moderate cytoplasmic positivity in glandular cells.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Septin 2 antibody (ab224410)



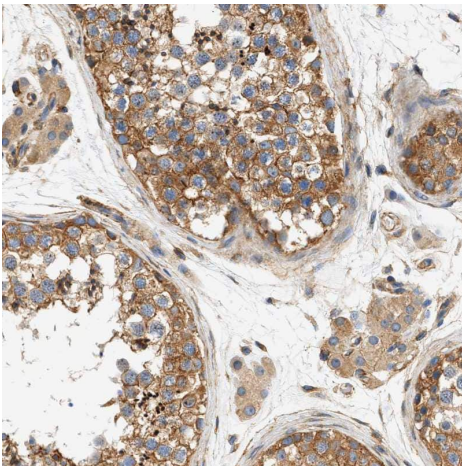
Paraffin-embedded human small intestine stained for Septin2 using ab224410 at 1/200 dilution in immunohistochemical analysis. Shows weak cytoplasmic positivity in glandular cells.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Septin 2 antibody (ab224410)



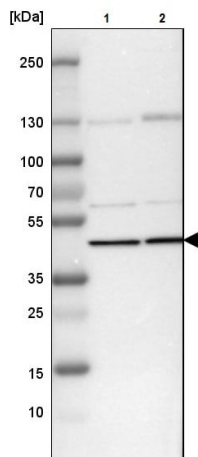
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Septin 2 antibody (ab224410)

Paraffin-embedded human cerebral cortex stained for Septin2 using ab224410 at 1/200 dilution in immunohistochemical analysis. Shows strong cytoplasmic positivity in glial cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Septin 2 antibody (ab224410)

Paraffin-embedded human testis stained for Septin2 using ab224410 at 1/200 dilution in immunohistochemical analysis. Shows strong cytoplasmic and membranous positivity in cells in seminiferous ducts.



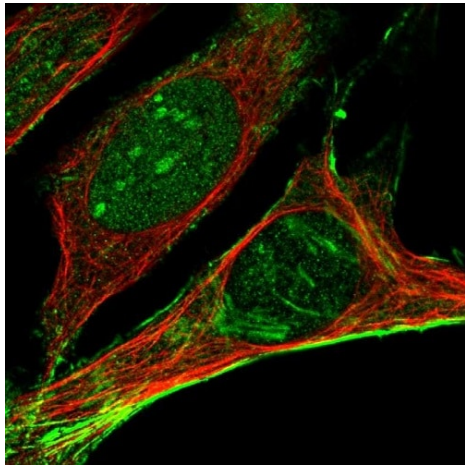
Western blot - Anti-Septin 2 antibody (ab224410)

All lanes : Anti-Septin 2 antibody (ab224410) at 1/100 dilution

Lane 1 : NIH/3T3 (mouse embryo fibroblast cell line) cell lysate

Lane 2 : NBT-II cell lysate

Predicted band size: 41 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Septin 2 antibody (ab224410)

PFA-fixed, Triton X-100 permeabilized U-2 OS (human bone osteosarcoma epithelial cell line) cells stained for Septin 2 (green) using ab224410 at 4 $\mu\text{g}/\text{ml}$ in ICC/IF.

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