


Product datasheet

Anti-Septin 2 antibody [EPR12123] ab179436

Recombinant RabMAb

4 References 7 Images

Overview

Product name	Anti-Septin 2 antibody [EPR12123]
Description	Rabbit monoclonal [EPR12123] to Septin 2
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat, Xenopus laevis 
Immunogen	Synthetic peptide within Human Septin 2 aa 250-350 (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">Q15019</a>
Positive control	Human fetal brain, U87-MG, Jurkat and MCF-7 lysates. Human hepatocellular carcinoma and pancreas tissues. MCF-7 and Jurkat cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant

Clonality	Monoclonal
Clone number	EPR12123
Isotype	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab179436 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

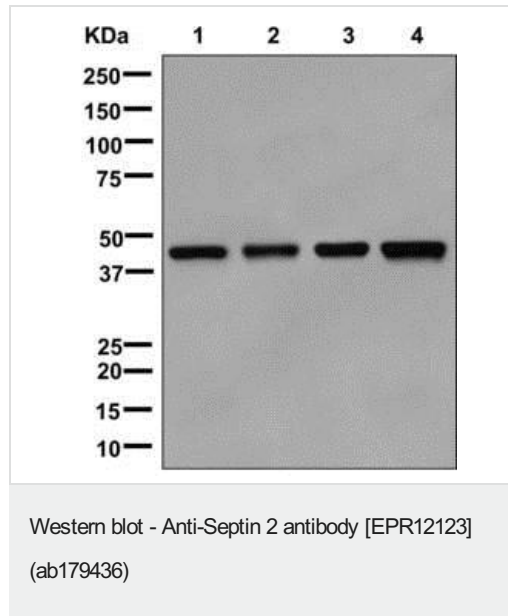
Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 41 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/50 - 1/100.
IP		1/10 - 1/100.

## Target

<b>Function</b>	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, <i>Listeria monocytogenes</i> and <i>Shigella flexneri</i> .
<b>Tissue specificity</b>	Widely expressed. Up-regulated in liver cancer.
<b>Sequence similarities</b>	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.
<b>Cellular localization</b>	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



**All lanes :** Anti-Septin 2 antibody [EPR12123] (ab179436) at 1/1000 dilution

**Lane 1 :** Human fetal brain lysate

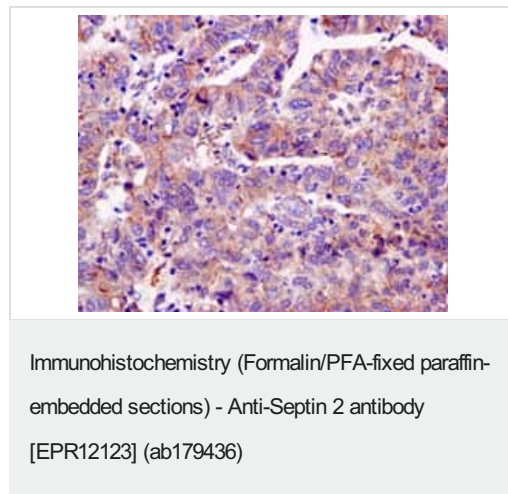
**Lane 2 :** U87-MG lysate

**Lane 3 :** Jurkat lysate

**Lane 4 :** MCF-7 lysate

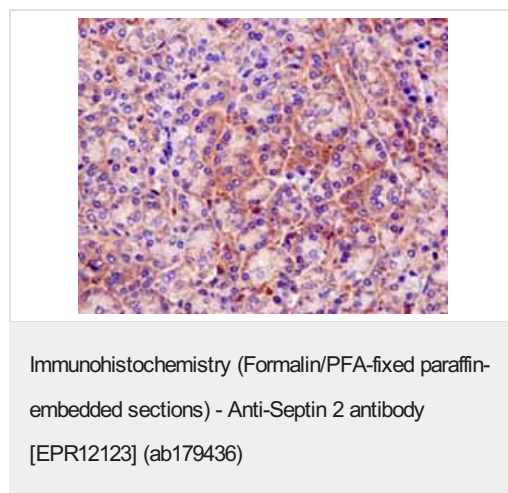
Lysates/proteins at 10 µg per lane.

**Predicted band size:** 41 kDa



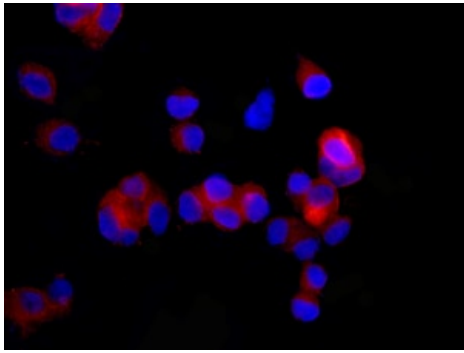
Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling Septin 2 with ab179436 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



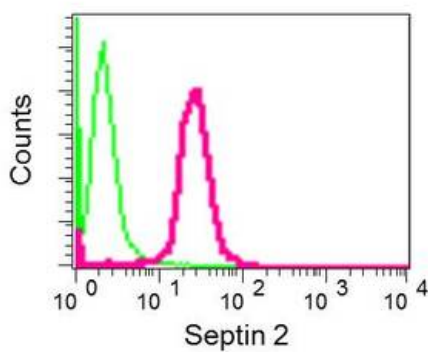
Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling Septin 2 with ab179436 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



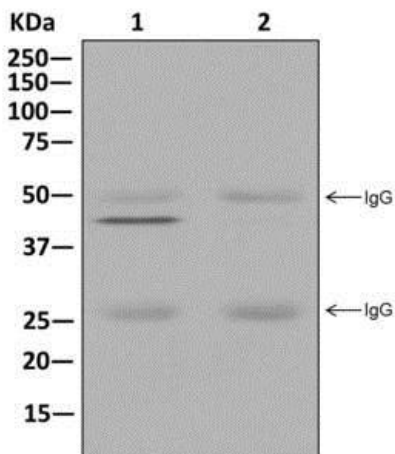
Immunofluorescent analysis of MCF-7 cells labeling Septin 2 with ab179436 at 1/50 dilution (red). DAPI nuclear staining (blue).

Immunocytochemistry/ Immunofluorescence - Anti-Septin 2 antibody [EPR12123] (ab179436)



Intracellular flow cytometric analysis of permeabilized Jurkat cells labeling Septin 2 with ab179436 at 1/10 dilution (red) compared to a rabbit IgG negative control (green).

Flow Cytometry (Intracellular) - Anti-Septin 2 antibody [EPR12123] (ab179436)



Western blot analysis on immunoprecipitation pellet from (1) MCF-7 cell lysate or (2) 1XPBS (negative control) using ab179436 at a 1/10 dilution for IP, and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

Immunoprecipitation - Anti-Septin 2 antibody [EPR12123] (ab179436)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Septin 2 antibody [EPR12123] (ab179436)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors