abcam

ab251065

Anti-Septin 8 antibody [EPR16099] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR16099
Purification technique	Affinity purification Protein A

Reactivity data

ICC/IF

Tested

Species	Rat
Dilution info	-
Notes	-

Expected

Species	Human, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information SEPTIN8

Function Filament-forming cytoskeletal GTPase (By similarity). May play a role in platelet secretion (PubMed:15116257). Seems to participate in the process of SNARE complex formation in synaptic vesicles (By similarity). Isoform 4. Stabilizes BACE1 protein levels and promotes the sorting and accumulation of BACE1 to the recycling or endosomal compartments, modulating the beta-amyloidogenic processing of APP.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab251065 is the carrier-free version of ab191404.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Septin 8 often referred to as SEPT8 belongs to the septin family of GTPase proteins. It participates in filament formation by polymerizing with other septins. This protein has a molecular weight of around 52 kDa. SEPT8 is expressed in various tissues with significant presence in the brain and heart. Its function depends on cell type and developmental stage exhibiting dynamic patterns of expression which make it integral to cellular processes.
Biological function summary	The protein is involved in maintaining cell structure and polarity. SEPT8 is part of larger septin complexes necessary for correct cytokinesis. It regulates cell division by contributing to the formation of cleavage furrow during mitosis. SEPT8 also influences membrane dynamics and vesicle trafficking showcasing a role in transport within cells.
Pathways	Septin 8 contributes to cytoskeleton organization and vesicle trafficking pathways. It associates with proteins such as actin and myosin playing roles in cell shape changes and intracellular transport. SEPT8 functions alongside other septins in the septin ring structures which are essential for several processes including cell cycle progression and vesicle sorting.

Associated diseases and disorders	Septin 8 has been linked to neurodegenerative conditions and cancer. Abnormal SEPT8 expression or mutations might lead to Alzheimer's disease due to its impact on neuronal transport systems. SEPT8 is also observed in tumorigenesis interfering with normal cell cycle control. In cancer its interaction with other septins could disrupt normal cell proliferation suggesting it as a potential therapeutic target.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

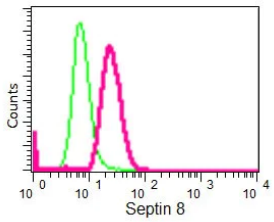
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

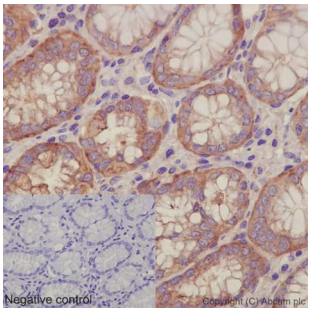
8 product images



Flow Cytometry (Intracellular) - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

Septin 8 Flow Cytometry (Intracellular) staining using rabbit Anti-Septin 8 antibody

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed K562 cells labeling Septin 8 with ab191404 at 1/150 dilution (pink), compared to a Rabbit monoclonal IgG isotype control (green). Goat anti-rabbit IgG (FITC) was used as secondary antibody at 1/150 dilution.

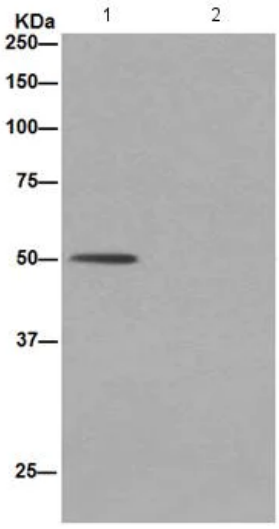


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

Septin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Septin 8 antibody

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded, Human stomach tissue labeling Septin 8 with ab191404 at 1/200 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Counter stained with Hematoxylin. In the negative control PBS was used instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Western blot analysis of Septin 8 in K562 cell lysate immunoprecipitated using ab191404 at 1/50 dilution (Lane 1). Lane 2: PBS instead of K562 lysates.

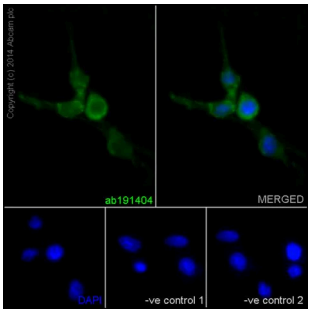
Secondary antibody: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.

All lanes:
Immunoprecipitation - Anti-Septin 8 antibody [EPR16099] (ab191404)

Performed under non-reducing conditions.

Predicted band size: 56 kDa

Observed band size: 56 kDa

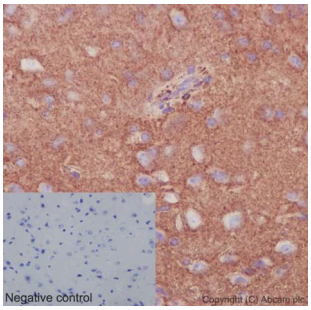


Immunocytochemistry/ Immunofluorescence - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

Septin 8 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Septin 8 antibody

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% tritonX-100 permeabilized C6 cells labeling Septin 8 with ab191404 at 1/200 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor®488) secondary antibody (ab150077) at 1/200 dilution. Nuclear counter stain DAPI (blue).

The two negative controls used anti-Septin 8 primary antibody at 1/200 dilution followed by Goat anti-mouse IgG (Alexa Fluor®594) secondary antibody at 1/400 dilution.

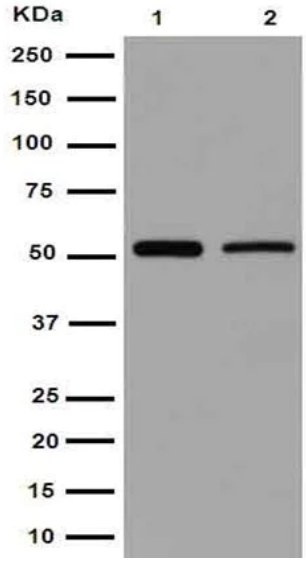


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

Septin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Septin 8 antibody

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded mouse brain tissue labeling Septin 8 with ab191404 at 1/200 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Counter stained with Hematoxylin. In the negative control PBS was used instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Septin 8 antibody [EPR16099] (ab191404) at 1/10000 dilution

Lane 1:
K562 cell lysate at 20 µg

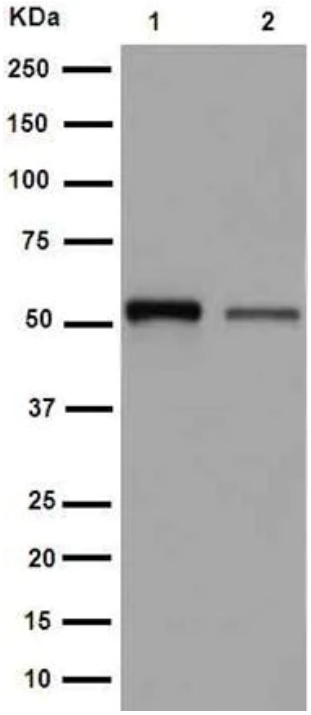
Lane 2:
HeLa cell lysate at 20 µg

Secondary

All lanes:
Goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa



Western blot - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Septin 8 antibody [EPR16099] (ab191404) at 1/1000 dilution

Lane 1:
HCT-116 cell lysate at 20 µg

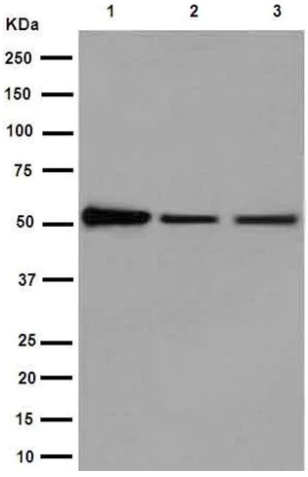
Lane 2:
U-87 MG cell lysate at 20 µg

Secondary

All lanes:
Goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa



Western blot - Anti-Septin 8 antibody [EPR16099] - BSA and Azide free (ab251065)

This data was developed using ab191404, the same antibody clone in a different buffer formulation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Septin 8 antibody [EPR16099] (ab191404) at 1/1000 dilution

Lane 1:
C6 cell lysate at 10 µg

Lane 2:
PC-12 cell lysate at 10 µg

Lane 3:
NIH/3T3 cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.