abcam

ab199722

Anti-CRMP1 antibody [EP14521]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP14521
Purification technique	Affinity purification Protein A
Specificity	ab199722 shows no cross reactivity with CRMP2.
Concentration	0.118 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Expected

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

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Species	Recombinant fragment - Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Expected

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

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/20
Notes	-

Expected

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

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/8000
Notes	-

Species	Rat
Dilution info	1/8000
Notes	-

Species	Human
Dilution info	1/8000
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Target data

See full target information CRMP1

Function Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton (PubMed:25358863). Plays a role in axon guidance (PubMed:25358863). During the axon guidance process, acts downstream of SEMA3A to promote FLNA dissociation from F-actin which results in the rearrangement of the actin cytoskeleton and the collapse of the growth cone (PubMed:25358863). Involved in invasive growth and cell migration (PubMed:11562390). May participate in cytokinesis (PubMed:19799413).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

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

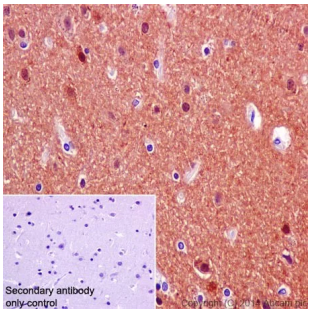
We do not recommend this combination. It is not covered by our product promise.

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.

11 product images

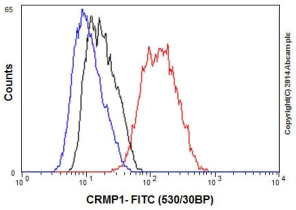


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CRMP1 antibody

Immunohistochemical analysis of paraffin-embedded Human cerebral cortex tissue labeling CRMP1 with ab199722 at 1/8000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm and nucleus staining on Human cerebral cortex is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

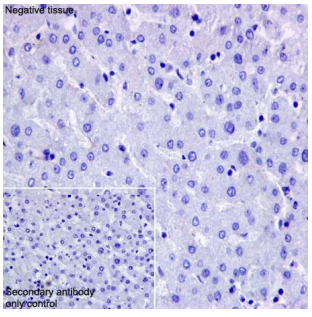
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Flow Cytometry (Intracellular) staining using rabbit Anti-CRMP1 antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed SH-SY5Y (Human neuroblastoma from bone marrow cells) cells labeling CRMP1 with ab199722 at 1/20 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730;black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.

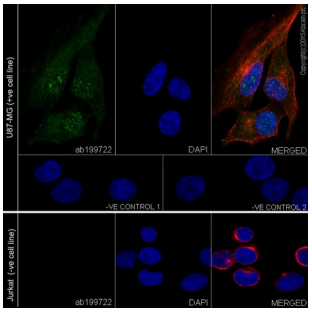


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CRMP1 antibody

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling CRMP1 with ab199722 at 1/8000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. No staining on Human liver tissue is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

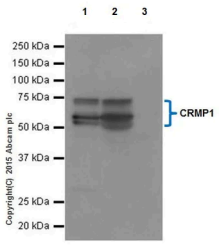
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CRMP1 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed 0.1% Triton X-100 permeabilized U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) and Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling CRMP1 with ab199722 at 1/500 dilution followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Cytoplasm and nuclear staining on U-87 MG cell line is observed. Negative expression in Jurkat cells. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).
The negative controls are as follows:-
-ve control 1: ab199722 at 1/500 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Immunoprecipitation - Anti-CRMP1 antibody [EP14521] (ab199722)

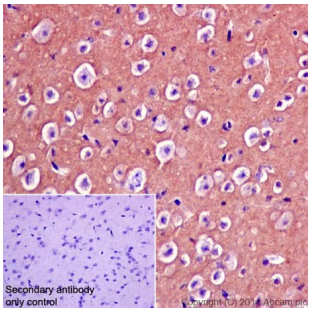
CRMP1 was immunoprecipitated from 1mg of Human fetal brain whole cell lysate with ab199722 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab199722 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500.
Lane 1: Human fetal brain whole cell lysate 10ug (Input). Lane 2: ab199722 IP in Human fetal brain whole cell lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab199722 in Human fetal brain whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds.

All lanes:
Immunoprecipitation - Anti-CRMP1 antibody [EP14521] (ab199722)

Predicted band size: 62 kDa

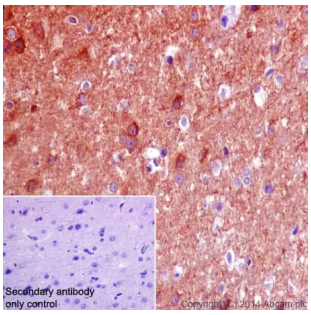


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CRMP1 antibody

Immunohistochemical analysis of paraffin-embedded Mouse cerebral cortex tissue labeling CRMP1 with ab199722 at 1/8000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on mouse cerebral cortex is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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

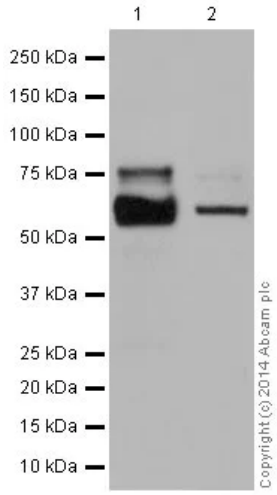


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CRMP1 antibody

Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex tissue labeling CRMP1 with ab199722 at 1/8000 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on rat cerebral cortex is observed. Counter stained with Hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

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



Western blot - Anti-CRMP1 antibody [EP14521] (ab199722)

CRMP1 Western blot staining using rabbit Anti-CRMP1 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
Based on the sequence analysis, ab199722 recognizes two isoforms with the predicted MWs of 62 kDa and 74 kDa, respectively.

All lanes:
Western blot - Anti-CRMP1 antibody [EP14521] (ab199722) at 1/5000 dilution

Lane 1:
Human fetal brain lysate at 20 µg

Lane 2:
SH-SY5Y (Human neuroblastoma from bone marrow cells) cell lysate at 20 µg

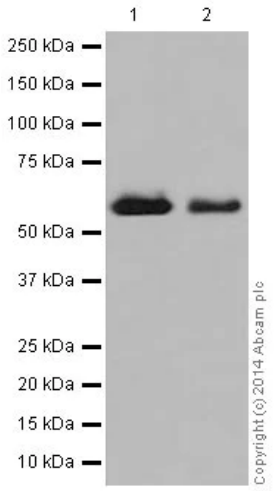
Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 53 kDa, 62 kDa

Observed band size: 52 kDa, 64 kDa, 80 kDa

Exposure time: 15s



Western blot - Anti-CRMP1 antibody [EP14521] (ab199722)

Blocking buffer: 5% NFDM/TBST.
Dilution buffer: 5% NFDM /TBST or 1%BSA /TBST.

Based on the sequence analysis, CRMP1 does not have similar isoforms within Mouse & Rat, therefore only a single band at approximately 62kDa is seen in Mouse and Rat lysates within western blot.

All lanes:
Western blot - Anti-CRMP1 antibody [EP14521] (ab199722) at 1/1000 dilution

Lane 1:
Mouse brain lysate at 10 µg

Lane 2:
C6 (Rat glial tumor cells) cell lysate at 10 µg

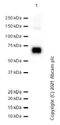
Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 62 kDa

Observed band size: 64 kDa

Exposure time: 30s



Western blot - Anti-CRMP1 antibody [EP14521] (ab199722)

Blocking and diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-CRMP1 antibody [EP14521] (ab199722) at 1/1000 dilution

All lanes:
N-His tagged Recombinant Human CRMP1 protein (aa 1 to 572) at 0.01 µg

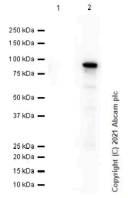
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 62 kDa

Observed band size: 65 kDa

Exposure time: 3s



Western blot - Anti-CRMP1 antibody [EP14521] (ab199722)

Blocking and diluting buffer and concentration: 5% NFDM/TBST
All lanes:
Western blot - Anti-CRMP1 antibody [EP14521] (ab199722) at 1/1000 dilution

All lanes:
N-GST tagged Recombinant Human CRMP2 protein (aa1-572) at 0.01 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 62 kDa

Observed band size: 89 kDa

Exposure time: 3s

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