abcam

ab249174

Anti-CAP1 antibody [EPR8339(B)] - 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	EPR8339(B)
Purification technique	Affinity purification Protein A
Concentration	1.019 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Rat, Mouse
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat, Mouse
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat, Mouse
Dilution info	-
Notes	-

Target data

See full target information CAP1

Function	Directly regulates filament dynamics and has been implicated in a number of complex developmental and morphological processes, including mRNA localization and the establishment of cell polarity.

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

ab249174 is the carrier-free version of ab155079.
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	The CAP1 protein also known as Cyclase-associated protein 1 is a dynamic actin-binding protein found in various tissues throughout the body. CAP1 has a mass of approximately 53 kDa. It is predominantly expressed in immune cells and muscle tissue. Mechanically CAP1 interacts with actin filaments promoting their disassembly and turnover therefore facilitating cytoskeletal restructuring critical for cell motility and shape changes.
Biological function summary	CAP1 plays a significant role in cellular signaling and organization. It does not exist as an isolated entity but instead forms complexes with actin and other cytoskeletal proteins to exert its functions. By promoting actin turnover CAP1 influences processes like intracellular trafficking and cell migration. This protein also contributes to the regulation of signal transduction pathways connected to cell proliferation and differentiation.
Pathways	CAP1 is involved in the reorganization of the actin cytoskeleton and the Wnt signaling pathway. In actin reorganization CAP1 works closely with cofilin another actin-binding protein to enhance actin dynamics. Through the Wnt pathway CAP1 modulates transcriptional activity and cellular responses to growth signals. These interactions highlight CAP1's integration into important pathways that regulate cell behavior.
Associated diseases and disorders	CAP1 is relevant in cancer progression and rheumatoid arthritis. In cancer abnormal regulation of CAP1 can lead to enhanced cell migration and invasion which are hallmarks of metastasis. Its interaction with proteins such as cofilin in cytoskeletal rearrangement impacts tumor cell dynamics. In rheumatoid arthritis altered CAP1 activity affects immune cell function and joint degradation. These connections highlight CAP1's importance in pathological conditions where actin dynamics and immune responses play critical roles.

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.

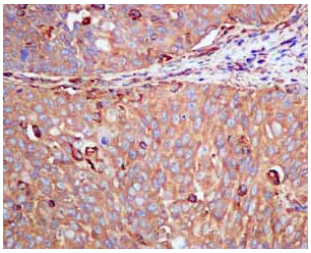
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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7 product images

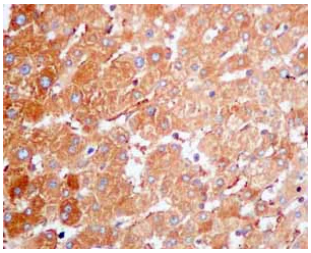


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAP1 antibody [EPR8339(B)] - BSA and Azide free (ab249174)

CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human cervical carcinoma tissue using ab155079 showing +ve staining.

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

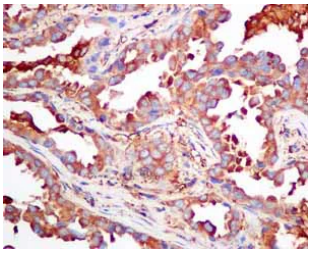


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CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human normal liver tissue using ab155079 showing +ve staining.

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

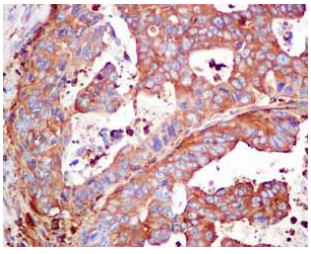


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAP1 antibody [EPR8339(B)] - BSA and Azide free (ab249174)

CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human lung adenocarcinoma tissue using ab155079 showing +ve staining.

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

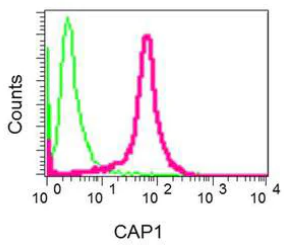


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAP1 antibody [EPR8339(B)] - BSA and Azide free (ab249174)

CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human gastric adenocarcinoma tissue using ab155079 showing +ve staining.

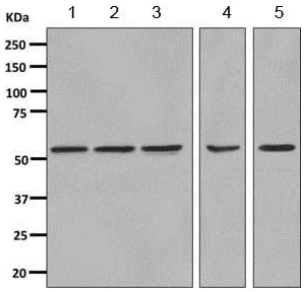
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CAP1 antibody [EPR8339(B)] - BSA and Azide free (ab249174)

CAP1 Flow Cytometry (Intracellular) staining using rabbit Anti-CAP1 antibody

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized 293 cells, labeling CAP1 with ab155079 at 1/10 dilution (red) or Rabiit IgG negative control (green).



Western blot - Anti-CAP1 antibody [EPR8339(B)] - BSA and Azide free (ab249174)

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-CAP1 antibody [EPR8339(B)] (ab155079) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

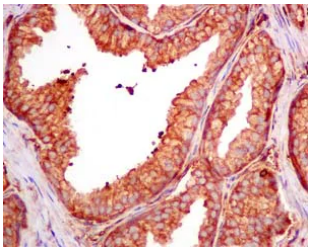
Lane 2:
293T cell lysate at 10 µg

Lane 3:
A431 cell lysate at 10 µg

Lane 4:
HepG2 cell lysate at 10 µg

Lane 5:
Caco-2 cell lysate at 10 µg

Predicted band size: 52 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAP1 antibody [EPR8339(B)] - BSA and Azide free (ab249174)

CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

This data was developed using ab155079, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded prostate tissue, labeling CAP1 with ab155079 at 1/100 dilution.

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

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