abcam

ab155079

Anti-CAP1 antibody [EPR8339(B)]

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	EPR8339(B)
Purification technique	Affinity purification Protein A
Concentration	0.157 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Expected

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

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
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	Conditional Ambient
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.

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.

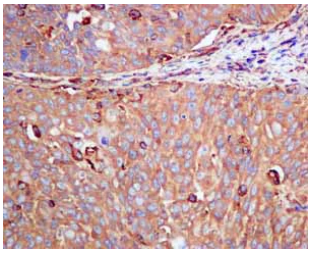
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

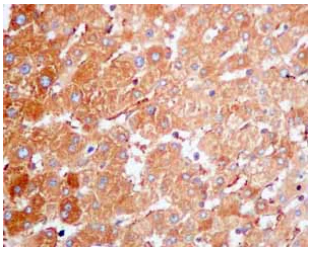


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAP1 antibody [EPR8339(B)] (ab155079)

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

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.

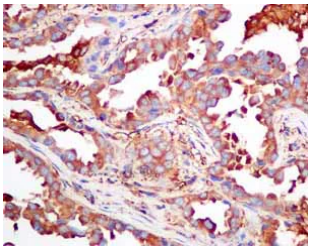


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CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

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.

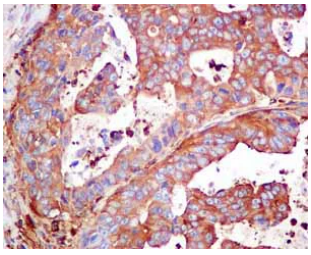


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CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

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.

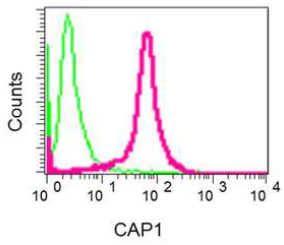


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CAP1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CAP1 antibody

Immunohistochemical analysis of paraffin embedded Human gastric adenocarcinoma tissue using ab155079 showing +ve staining.

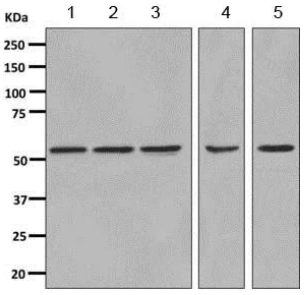
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CAP1 antibody [EPR8339(B)] (ab155079)

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

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)] (ab155079)

All lanes:
Western blot - Anti-CAP1 antibody [EPR8339(B)] (ab155079) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

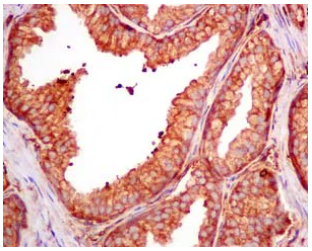
Lane 2:
293T cell lysate at 10 µg

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)] (ab155079)

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

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.

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