abcam

ab88446

Anti-CAP1 antibody

Key facts

Isotype	IgG
Host species	Mouse
Storage buffer	pH: 7.4 Constituents: PBS
Form	Liquid
Clonality	Polyclonal
Immunogen	Recombinant Full Length Protein corresponding to Human CAP1. Database link Q01518
Carrier free	Yes
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	ab37355 - Mouse polyclonal IgG, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	10 µg/mL
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	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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

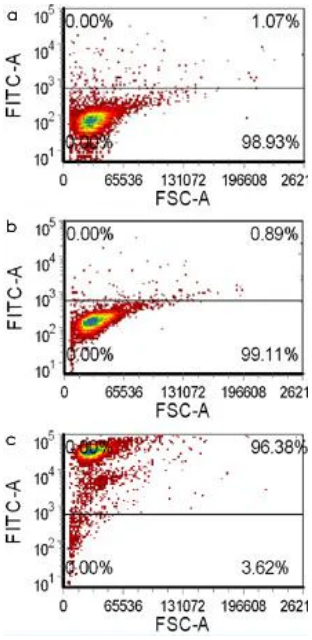
We do not recommend this combination. It is not covered by our product promise.

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.

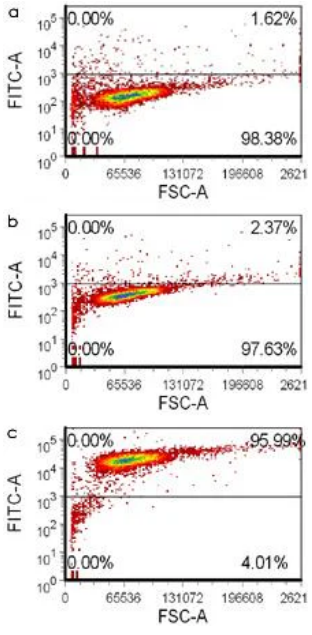
4 product images



Flow Cytometry - Anti-CAP1 antibody (ab88446)

CAP1 Flow Cytometry staining using mouse Anti-CAP1 antibody

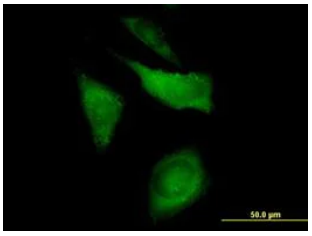
FACS analysis of (a) negative control unstained, (b) negative control goat anti-mouse-FITC stained and (c) ab88446 stained methanol-treated human promonocytic THP-1 cells.



Flow Cytometry - Anti-CAP1 antibody (ab88446)

CAP1 Flow Cytometry staining using mouse Anti-CAP1 antibody

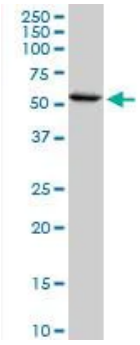
FACS analysis of (a) negative control unstained, (b) negative control goat anti-mouse-FITC stained and (c) ab88446 stained methanol-treated human HeLa cells.



Immunocytochemistry/ Immunofluorescence - Anti-CAP1 antibody (ab88446)

CAP1 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-CAP1 antibody

Immunofluorescence image staining human CAP1 in HeLa cells, using ab88446 at 10µg/ml.



Western blot - Anti-CAP1 antibody (ab88446)

All lanes:
Western blot - Anti-CAP1 antibody (ab88446) at 1 µg/mL

All lanes:
A-431 cell lysate at 50 µg

Secondary

All lanes:
Goat Anti-Mouse IgG at 1/2500 dilution

Predicted band size: 52 kDa

Observed band size: 52 kDa

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