abcam

ab32328

Anti-RhoGAP antibody [EP489Y]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP489Y
Purification technique	Affinity purification Protein A
Concentration	0.648 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

ICC/IF

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Rat
Dilution info	1/500
Notes	-

Species	Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/60 - 1/1000
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

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

Target data

See full target information ARHGAP5

Function	GTPase-activating protein for Rho family members (PubMed:8537347).

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	RhoGAPs also known as Rho GTPase-activating proteins perform a critical mechanical role by converting active GTP-bound Rho GTPases into their inactive GDP-bound form. RhoGAPs regulate this GTPase activity through their GAP domain acting as molecular switches in various signaling pathways. The typical mass of RhoGAPs can vary around 50-150 kDa depending on the specific family member. Expression of RhoGAPs occurs ubiquitously across many cell types reflecting their importance in cellular signaling processes.
Biological function summary	RhoGAPs regulate the actin cytoskeleton influencing cell mobility shape and cycle progression. These proteins often work as part of a larger complex interacting with other signaling molecules to modulate cytoskeletal dynamics. By keeping Rho GTPases activities in check RhoGAPs play essential roles in maintaining normal cellular function and dynamics. They contribute to processes such as cell migration proliferation and differentiation.
Pathways	RhoGAPs integrate into the Rho/Rac/Cdc42 signaling pathways serving as key regulators of actin cytoskeleton reorganization. In these pathways RhoGAPs balance the activity of Rho GTPases to ensure proper response to stimuli. Together with proteins such as RhoGEFs which activate Rho GTPases RhoGAPs form a regulatory network that precisely controls cytoskeletal and membrane dynamics critical for effective cellular responses.
Associated diseases and disorders	Defects in RhoGAP function have been implicated in cancer progression and neurodegenerative disorders. Dysfunctional RhoGAP activity can lead to unregulated cell proliferation and survival contributing to cancer development. Similarly in neurological contexts aberrant RhoGAP signaling can affect neuron structure and function potentially linking to Alzheimer's disease. These associations highlight the importance of RhoGAPs and their interactions with Rho GTPases in maintaining cellular homeostasis and human health.

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

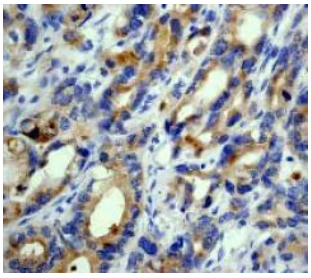
We do not recommend this combination. It is not covered by our product promise.

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.

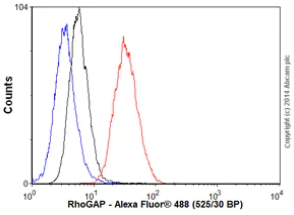
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RhoGAP antibody [EP489Y] (ab32328)

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

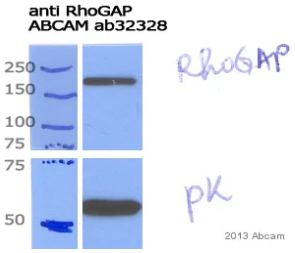
ab32328 at a 1/100 dilution staining human RhoGAP in stomach carcinoma by Immunohistochemistry Paraffin embedded tissue
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-RhoGAP antibody [EP489Y] (ab32328)

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

Overlay histogram showing A431 cells stained with ab32328 (red line). The cells were fixed with 80% methanol (5 min)/ and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32328 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



This image is courtesy of an anonymous customer review

Western blot - Anti-RhoGAP antibody [EP489Y] (ab32328)

All lanes:
Western blot - Anti-RhoGAP antibody [EP489Y] (ab32328) at 1/500 dilution

All lanes:
Mouse MEFs whole cell lysate at 50 µg

Secondary

All lanes:
HRP-conjugated Goat anti-rabbit IgG polyclonal at 1/2000 dilution

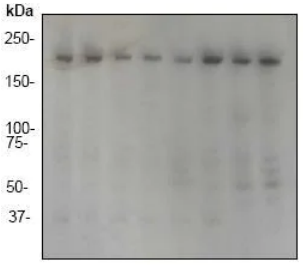
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 171 kDa

Observed band size: 190 kDa

Exposure time: 5min



Western blot - Anti-RhoGAP antibody [EP489Y] (ab32328)

All lanes:
Western blot - Anti-RhoGAP antibody [EP489Y] (ab32328) at 1/500 dilution

Lane 1:
HeLa cell lysate

Lane 2:
Jurkat cell lysate

Lane 3:
MCF-7 cell lysate

Lane 4:
K562 cell lysate

Lane 5:
A431 cell lysate

Lane 6:
293 cell lysate

Lane 7:
NIH 3T3 cell lysate

Lane 8:
PC12 cell lysate

Predicted band size: 171 kDa, 29 kDa

Observed band size: 190 kDa

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