abcam

ab171973

Anti-ARHGAP27 antibody [EPR12250]

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	EPR12250
Purification technique	Affinity purification Protein A
Concentration	0.18 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	-

IP

Not recommended

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50 - 1/100
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.

Target data

See full target information ARHGAP27

Function	Rho GTPase-activating protein which may be involved in clathrin-mediated endocytosis. GTPase activators for the Rho-type GTPases act by converting them to an inactive GDP-bound state. Has activity toward CDC42 and RAC1 (By similarity).

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

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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	ARHGAP27 also known as Rho GTPase-activating protein 27 is a regulatory protein with a mass of approximately 88 kDa. It modulates the activity of Rho family GTPases turning them from an active GTP-bound state to an inactive GDP-bound state. This protein mainly expresses in the brain and testis suggesting its specialized roles in these tissues. By controlling the actin cytoskeleton ARHGAP27 influences cell shape motility and division.

Biological function summary	The regulation of cytoskeletal dynamics involves ARHGAP27 in cellular processes. It plays a part in endocytosis a process important for internalizing molecules from the cell surface. ARHGAP27 functions in coordination with other GAPs (GTPase-activating proteins) to achieve its role. It does not operate singularly but can interact within a larger protein complex to exert its function effectively.
Pathways	ARHGAP27 participates within the regulation of Rho GTPase cycle pathway. This pathway is significant for actin cytoskeleton organization. ARHGAP27 interfaces with other proteins like Cdc42 and Rac1 which play pivotal roles in signal transduction related to cytoskeletal arrangements and cellular responses. The protein's modulation of these GTPases impacts intracellular signaling cascades that adjust the organization of actin filaments.
Associated diseases and disorders	ARHGAP27 associations relate to neurodevelopmental conditions and certain cancers. Mutations or dysregulation of ARHGAP27 may contribute to improper neural connections or tumor development. In some cancer studies researchers identify links between ARHGAP27 and the oncogenic protein RhoA. The interactions and pathways involving ARHGAP27 provide insights into its contributions to pathological states highlighting its potential as a biomarker or therapeutic target.

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

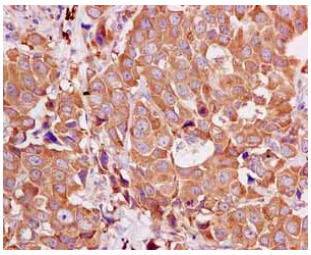
We do not recommend this combination. It is not covered by our product promise.

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.

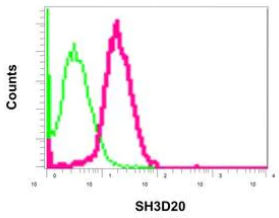
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARHGAP27 antibody [EPR12250] (ab171973)

ARHGAP27 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ARHGAP27 antibody

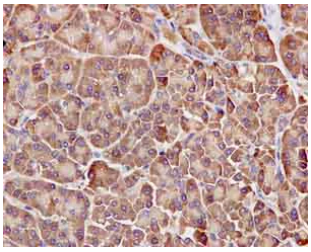
Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling ARHGAP27 with ab171973 at 1/100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-ARHGAP27 antibody [EPR12250] (ab171973)

ARHGAP27 Flow Cytometry (Intracellular) staining using rabbit Anti-ARHGAP27 antibody

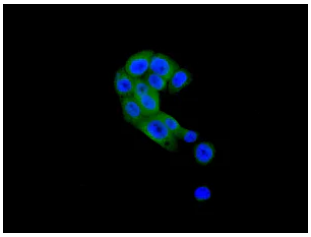
Intracellular flow cytometric analysis of permeabilized A549 cells labeling ARHGAP27 with ab171973 at 1/10 dilution (red) or a Rabbit IgG (negative) (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARHGAP27 antibody [EPR12250] (ab171973)

ARHGAP27 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ARHGAP27 antibody

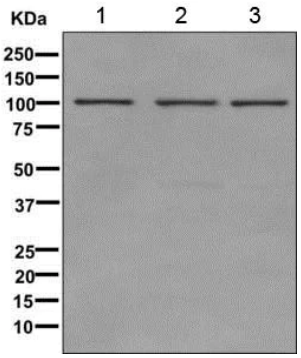
Immunohistochemical analysis of paraffin-embedded Human pancreas tissue labeling ARHGAP27 with ab171973 at 1/100 dilution.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-ARHGAP27 antibody [EPR12250] (ab171973)

ARHGAP27 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ARHGAP27 antibody

Immunofluorescent analysis of BxPC-3 cells labeling ARHGAP27 with ab171973 (green) at 1/50 dilution. DAPI nuclear staining (blue).



Western blot - Anti-ARHGAP27 antibody [EPR12250] (ab171973)

Note: primary antibody diluted in BSA.
All lanes:
Western blot - Anti-ARHGAP27 antibody [EPR12250] (ab171973) at 1/1000 dilution

Lane 1:
HepG2 cell lysate at 10 µg

Lane 2:
A549 cell lysate at 10 µg

Lane 3:
BxPC-3 cell lysate at 10 µg

Predicted band size: 98 kDa

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