abcam

ab196024

Anti-RABL3 antibody [EPR16709] - C-terminal

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	EPR16709
Purification technique	Affinity purification Protein A
Concentration	0.544 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human

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

Expected

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

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Rat
Dilution info	1/50 - 1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/50 - 1/100
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information Rab-like protein 3

Function	Small GTPase required for KRAS signaling regulation and modulation of cell proliferation (PubMed:31406347). Regulator of KRAS prenylation, and probably prenylation of other small GTPases (PubMed:31406347). Required for lymphocyte development and function (By similarity). Not required for myeloid cell development (By similarity). Interacts with Rab11 to promote ciliary vesicle formation at the mother centriole, thereby regulating early ciliogenesis. The GTP-binding capacity of RABL3 is essential for ciliogenesis (PubMed:36052645).

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

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	RABL3 also known as Rab-like protein 3 is a member of the Rab-like small GTPase family. It has a molecular mass of approximately 28 kDa. RABL3 plays a central role in cellular trafficking and transport by acting as a molecular switch cycling between an active GTP-bound state and an inactive GDP-bound state. Expression of RABL3 is widespread across various tissues although its exact expression pattern may vary depending on the cell type and physiological condition.
Biological function summary	RABL3 functions in the regulation of intracellular signaling pathways. It associates with other molecular partners to influence the dynamics of cargo transport through vesicles. While it is not specifically identified as part of a larger complex its interactions with other small GTPases suggest a collaborative role in vesicle docking and fusion processes. RABL3's function impacts cell communication and signal transduction vital processes in maintaining cellular homeostasis and response to environmental signals.
Pathways	RABL3 engages in the RAS signaling pathway where it may regulate downstream effects of RAS activation. In particular it can interact with proteins like RAB6 and RABL2 which share similar roles in vesicular trafficking and transport. The RAS signaling pathway's influence in growth and metabolism provides insight into RABL3's potential to modulate signal transduction efficiency and cellular response mechanisms.
Associated diseases and disorders	Defects in RABL3 are associated with certain forms of cancer and neurodegenerative disorders. Its involvement is particularly noted in its connection to the KRAS protein which is significantly implicated in oncogenic transformations. Alterations in RABL3 expression or function may disrupt normal cellular signaling and transport contributing to disease progression. Understanding these interactions can help target therapeutic strategies for conditions related to these dysregulated pathways.

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

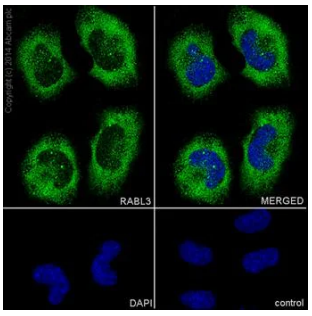
We do not recommend this combination. It is not covered by our product promise.

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.

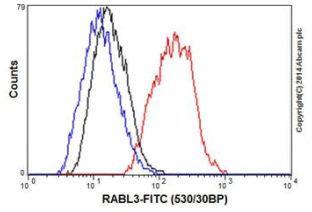
6 product images



Immunocytochemistry/ Immunofluorescence - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024)

RABL3 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-RABL3 antibody

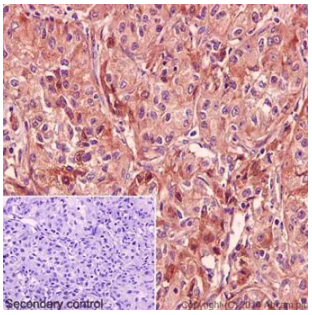
Immunofluorescence analysis of paraformaldehyde-fixed A549 cells labeling RABL3 with ab196024 at a 1/100 dilution. As secondary antibody goat anti-rabbit IgG (Alexa Fluor®488) ab150077 was used at a 1/500. In blue DAPI staining.



Flow Cytometry (Intracellular) - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024)

RABL3 Flow Cytometry (Intracellular) staining using rabbit Anti-RABL3 antibody

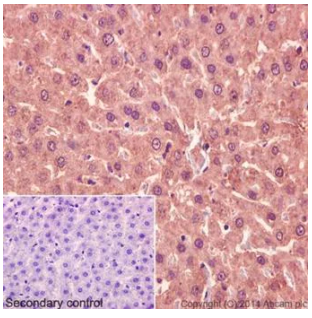
Intracellular Flow Cytometry analysis of paraformaldehyde-fixed MCF7 cells labeling RABL3 with ab196024 at a 1/100 dilution and secondary antibody goat anti-rabbit IgG (FITC, red) at a 1/150 dilution, isotype control rabbit IgG (black) and unlabeled control cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024)

RABL3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RABL3 antibody

Immunohistochemical analysis of paraffin-embedded, human renal adenocarcinoma tissue labeling RABL3 with ab196024 at a 1/100 dilution. Counter stained with hematoxylin. As secondary antibody goat anti-rabbit IgG H&L (HRP) ab97051 was used at a 1/500. In blue DAPI staining. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

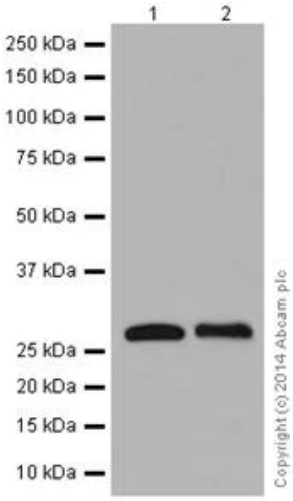


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024)

RABL3 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-RABL3 antibody

Immunohistochemical analysis of paraffin-embedded, rat liver tissue labeling RABL3 with ab196024 at a 1/100 dilution. Counter stained with hematoxylin. As secondary antibody goat anti-

rabbit IgG H&L (HRP) ab97051 was used at a 1/500. In blue DAPI staining.
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024)

All lanes:
Western blot - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024) at 1/1000 dilution

Lane 1:
K562 cell lysate at 20 µg

Lane 2:
293 cell lysate at 20 µg

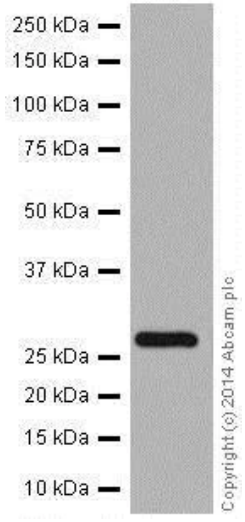
Secondary

All lanes:
goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 26 kDa

Observed band size: 26 kDa



Western blot - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024)

All lanes:
Western blot - Anti-RABL3 antibody [EPR16709] - C-terminal (ab196024) at 1/10000 dilution

All lanes:
MCF7 cell lysate at 20 µg

Secondary

All lanes:
Goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 26 kDa

Observed band size: 26 kDa

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