abcam

ab250951

Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR15265-21
Purification technique	Affinity purification Protein A
Concentration	1.017 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Rat
Dilution info	-

Notes	For antigen retrieval, heat up to 98 degree C, below boiling, and then let cool for 10-20 minutes.

Species	Human
Dilution info	-
Notes	For antigen retrieval, heat up to 98 degree C, below boiling, and then let cool for 10-20 minutes.

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

WB

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Target data

See full target information ARL2BP

Function	Together with ARL2, plays a role in the nuclear translocation, retention and transcriptional activity of STAT3. May play a role as an effector of ARL2.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250951 is the carrier-free version of ab188322.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	ARL2BP also known as ADP-ribosylation factor-like 2 binding protein plays an important role in cellular transport mechanisms. This protein weighs approximately 17 kDa. ARL2BP is mainly expressed in tissues like heart skeletal muscle and pancreas. It interacts with microtubules and is involved in intracellular trafficking and cell movement.
Biological function summary	ARL2BP is involved in processes maintaining mitochondrial function. It forms part of a protein complex that includes ARL2 a small GTPase which regulates the stability and functionality of tubulin cofactor E (TBCE). This interaction is important for proper microtubule dynamics and may influence effective protein folding within mitochondria.
Pathways	ARL2BP has important roles in the microtubule and mitochondrial maintenance pathways. It interacts significantly with tubulin and the microtubule assembly connecting to pathways governing cell structure and movement. Additionally ARL2BP's function ties closely with the maintenance of mitochondrial health impacting related proteins like BBS1 and BBS4 in the context of mitochondrial homoeostasis.
Associated diseases and disorders	Disruptions in ARL2BP functions relate to neurological conditions like retinitis pigmentosa. Altered ARL2BP interactions affect proteins such as ARL2 and TBCE which contribute to disease pathology. Additionally these alterations may correlate with metabolic syndromes due to mitochondrial dysregulation linking ARL2BP to broader metabolic and neurodegenerative diseases.

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

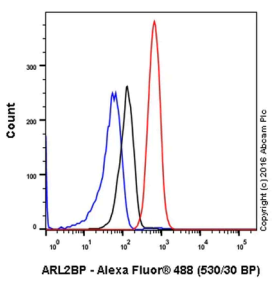
We do not recommend this combination. It is not covered by our product promise.

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:

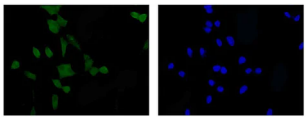
8 product images



Flow Cytometry (Intracellular) - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Flow Cytometry (Intracellular) staining using rabbit Anti-ARL2BP antibody

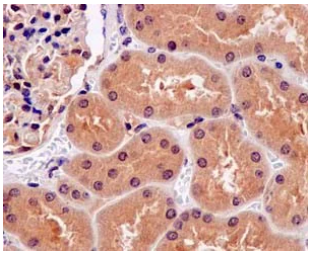
This data was developed using ab188322, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of A549 (human lung carcinoma) cells labelling ARL2BP (red) with purified ab188322 at a dilution of 1/200. The secondary antibody used was Alexa Fluor® 488 goat-anti-rabbit IgG (1/2000). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Isotype control antibody was rabbit monoclonal IgG (black). The blue line shows cells without incubation with primary and secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ARL2BP antibody

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of 4% paraformaldehyde-fixed A549 cells labeling ARL2BP with ab188322 at 1/100 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody at 1/200 dilution. Counterstained with Dapi (blue).

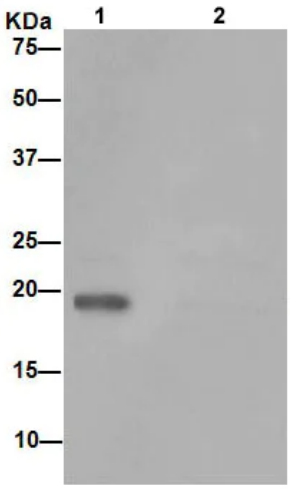


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ARL2BP antibody

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling ARL2BP with ab188322 at 1/50 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



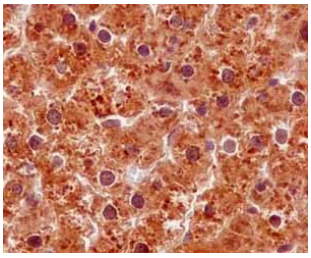
Immunoprecipitation - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
Western blot analysis of ARL2BP in HepG2 cell lysate immunoprecipitated with ab188322 at 1/50 dilution (Lane 1). Lane 2: PBS instead of HepG2 lysate.

Secondary antibody: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.

All lanes:
Immunoprecipitation - Anti-ARL2BP antibody [EPR15265-21] (ab188322)

Predicted band size: 19 kDa

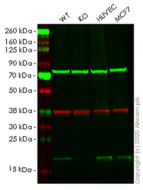


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ARL2BP antibody

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling ARL2BP with ab188322 at 1/50 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Western blot staining using rabbit Anti-ARL2BP antibody

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
Lanes 1-4: Merged signal (red and green). Green - ab188322 observed at 20 kDa. Red - loading control ab8245 observed at 36 kDa.

ab188322 Anti-ARL2BP antibody [EPR15265-21] was shown to specifically react with ARL2BP in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265269 (knockout cell lysate ab258312) was used. Wild-type and ARL2BP knockout samples were subjected to SDS-PAGE. ab188322 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-ARL2BP antibody [EPR15265-21] (ab188322) at 1/1000 dilution

Lane 1:

Wild-type HeLa cell lysate at 20 µg

Lane 2:
ARL2BP knockout HeLa cell lysate at 20 µg

Lane 3:
HUVEC cell lysate at 20 µg

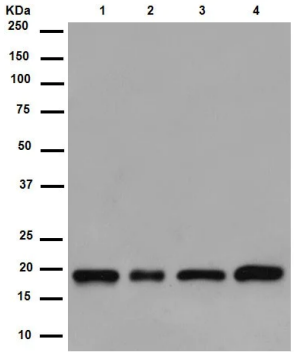
Lane 4:
MCF7 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 19 kDa

Observed band size: 20 kDa



Western blot - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Western blot staining using rabbit Anti-ARL2BP antibody

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-ARL2BP antibody [EPR15265-21] (ab188322) at 1/10000 dilution

Lane 1:
Human fetal brain lysate at 20 µg

Lane 2:
HUVEC cell lysate at 20 µg

Lane 3:
A549 cell lysate at 20 µg

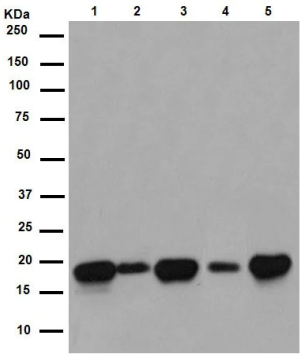
Lane 4:
HepG2 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 19 kDa

Observed band size: 19 kDa



Western blot - Anti-ARL2BP antibody [EPR15265-21] - BSA and Azide free (ab250951)

ARL2BP Western blot staining using rabbit Anti-ARL2BP antibody

This data was developed using ab188322, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-ARL2BP antibody [EPR15265-21] (ab188322) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 10 µg

Lane 2:
Mouse heart tissue lysate at 10 µg

Lane 3:
Rat spleen tissue lysate at 10 µg

Lane 4:
RAW 264.7 cell lysate at 10 µg

Lane 5:
NIH/3T3 lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 19 kDa

Observed band size: 19 kDa

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