abcam

ab249510

Anti-ARPC5L antibody [EPR10274] - 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	EPR10274
Purification technique	Affinity purification Protein A
Concentration	1.036 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information ARPC5L

Function	May function as component of the Arp2/3 complex which is involved in regulation of actin polymerization and together with an activating nucleation-promoting factor (NPF) mediates the formation of branched actin networks.

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

ab249510 is the carrier-free version of ab169763.

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	ARPC5L also known as Actin-Related Protein 2/3 Complex Subunit 5-Like is a smaller subunit of the ARP2/3 complex with a molecular mass around 16 kDa. This protein acts mechanically as an important regulator in the nucleation of new actin filaments aiding in the branching of the actin cytoskeleton. Scientists detect ARPC5L expression across diverse human tissues pointing to its broad role in cellular dynamics.
Biological function summary	ARPC5L aids actin filament dynamics as part of the ARP2/3 complex. This complex essential for cellular shape and motility helps drive the formation of lamellipodia and filopodian important structures in cell migration. Its function in remodeling the cytoskeleton makes it important in processes such as endocytosis and intracellular trafficking contributing to normal cell function and response to external stimuli.
Pathways	ARPC5L works within the cytoskeletal remodeling and cell motility pathways. Within the Wnt signaling pathway it plays a role in the regulation of cytoskeletal organization letting cells respond to signaling cues. The protein associates with others like ARPC1 and ARPC2 to facilitate these structural changes highlighting its importance to cellular adaptability and movement.
Associated diseases and disorders	ARPC5L has connections to cancers including breast and colorectal cancer. Abnormal regulation or mutation of the ARP2/3 complex can lead to altered cell migration and invasiveness contributing to cancer progression. The protein's interaction with elements of the Rho family such as RhoA and Rac1 integrates it into processes often hijacked in malignancies impacting how cells move invade and adhere.

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.

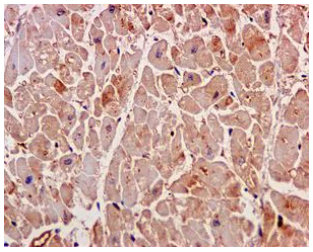
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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5 product images

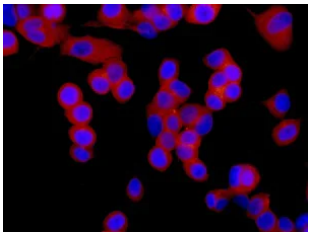


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ARPC5L antibody [EPR10274] - BSA and Azide free (ab249510)

ARPC5L Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ARPC5L antibody

This data was developed using ab169763, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human heart tissue labeling ARPC5L with ab169763 at 1/250.

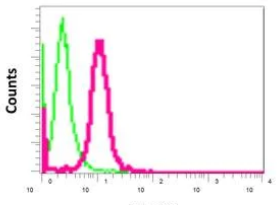
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-ARPC5L antibody [EPR10274] - BSA and Azide free (ab249510)

ARPC5L Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ARPC5L antibody

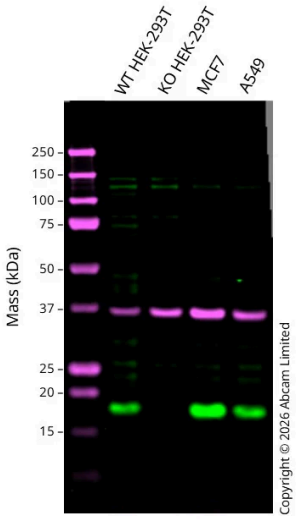
This data was developed using ab169763, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of MCF7 cells labeling ARPC5 with ab169763 at 1/250 (red) with DAPI staining (blue).



Flow Cytometry (Intracellular) - Anti-ARPC5L antibody [EPR10274] - BSA and Azide free (ab249510)

ARPC5L Flow Cytometry (Intracellular) staining using rabbit Anti-ARPC5L antibody

This data was developed using ab169763, the same antibody clone in a different buffer formulation.
Intracellular flow cytometrical analysis of permeabilized MOLT4 cells with ab169763 antibody at a dilution of 1/10 (red) or a rabbit IgG (negative) (green).



Western blot - Anti-ARPC5L antibody [EPR10274] - BSA and Azide free (ab249510)

ARPC5L Western blot staining using rabbit Anti-ARPC5L antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab169763).

Western blot: Anti-ARPC5L antibody [EPR10274] ab169763 staining at 1/5000 dilution, shown in green; Mouse anti GAPDH ab8245 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 18 kDa in Wild-type HEK-293T cell line with no signal observed at this size in ARPC5L knockout HEK-293T cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5% Milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit 800CW and Goat anti-Mouse 680RD at 1/20,000 dilution.
All lanes:
Western blot - Anti-ARPC5L antibody [EPR10274] (ab169763) at 1/5000 dilution

Lane 1:
Wild-type HEK-293T cell lysates at 20 µg

Lane 2:
Western blot - Human ARPC5L knockout HEK-293T cell line (ab266399) at 20 µg

Lane 3:
MCF7 cell lysates at 20 µg

Lane 4:
A549 cell lysates at 20 µg

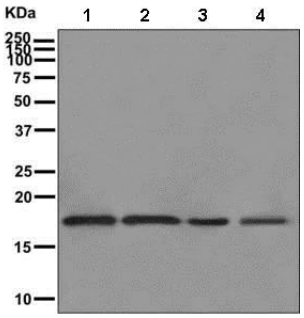
Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 16 kDa

Observed band size: 18 kDa



Western blot - Anti-ARPC5L antibody [EPR10274] - BSA and Azide free (ab249510)

This data was developed using ab169763, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-ARPC5L antibody [EPR10274] (ab169763) at 1/1000 dilution

Lane 1:
U87-MG lysate at 10 µg

Lane 2:
MCF7 lysate at 10 µg

Lane 3:
MOLT4 lysate at 10 µg

Lane 4:
Fetal brain lysate at 10 µg

Predicted band size: 17 kDa

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