abcam

ab247319

Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free

Recombinant | RabMAb

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	EP1862Y
Purification technique	Affinity purification Protein A
Concentration	1.02 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	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Not recommended

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Target data

See full target information RDX

Function	Probably plays a crucial role in the binding of the barbed end of actin filaments to the plasma membrane.

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

ab247319 is the carrier-free version of ab52495.

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	Radixin also known as RDX is a member of the ezrin-radixin-moesin (ERM) family of proteins. It weighs approximately 68 kDa and is expressed in a variety of tissues with high levels found in the brain liver and intestines. Radixin functions mechanically by binding to actin filaments and linking them to the plasma membrane. This process is essential for maintaining cell shape and facilitating signal transduction.
Biological function summary	Radixin plays a role in modulating cell surface structure which influences microvilli formation and stability. Radixin serves as a linkage between the actin cytoskeleton and the plasma membrane which helps in forming actin-rich surface structures. It does not function alone; it often acts as part of larger complexes that control cytoskeleton-related activities. Its role in maintaining cellular architecture makes it integral to processes like cell adhesion migration and polarization.
Pathways	Radixin is an important component in signaling pathways that regulate the cytoskeleton and cell membrane interactions. Key pathways include the Rho family of GTPases and the PI3K/Akt pathway. Radixin interacts with these pathways by connecting with proteins such as RhoA which regulates actin dynamics and Akt which influences cell survival and growth. These interactions are important for cellular responses to environmental and internal signals.

Associated diseases and disorders	Improper function of radixin relates to certain pathological conditions including hepatocellular carcinoma and cholestasis. In hepatocellular carcinoma radixin impacts cell proliferation and migration making it a potential target for cancer therapy. In cholestasis radixin dysfunction has connections with altered bile canalicular structures often interacting with proteins like CFTR. These associations highlight its significance as a potential target for therapeutic strategies aiming to correct cellular structures in these disorders.

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

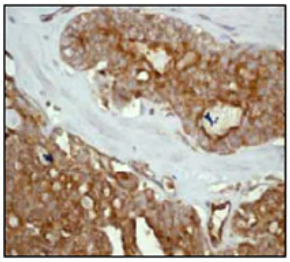
We do not recommend this combination. It is not covered by our product promise.

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.

7 product images

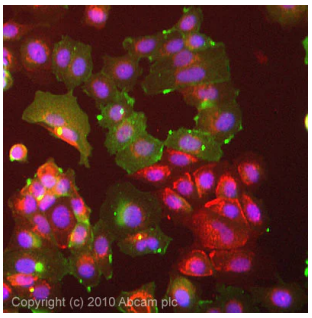


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

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

This data was developed using ab52495, the same antibody clone in a different buffer formulation. Immunohistochemical staining of paraffin-embedded human ovarian carcinoma using ab52495 at 1/100 dilution.

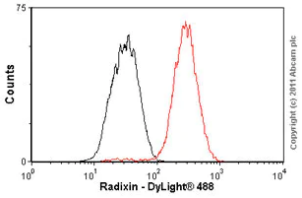
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

Radixin/RDX Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Radixin/RDX antibody

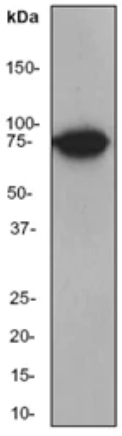
This data was developed using ab52495, the same antibody clone in a different buffer formulation.ICC/IF image of ab52495 stained Mcf7 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab52495, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.



Flow Cytometry (Intracellular) - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

Radixin/RDX Flow Cytometry (Intracellular) staining using rabbit Anti-Radixin/RDX antibody

This data was developed using ab52495, the same antibody clone in a different buffer formulation. Overlay histogram showing HeLa cells stained with ab52495 (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 (ab52495, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Western blot - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

Radixin/RDX Western blot staining of HeLa cell lysate using rabbit Anti-Radixin/RDX antibody

This data was developed using ab52495, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319) at 1/1000 dilution

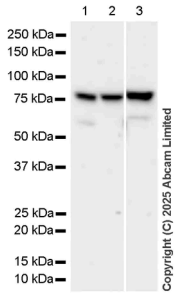
All lanes:
HeLa cell lysate at 10 µg

Secondary

All lanes:
HRP labeled goat anti-rabbit at 1/2000 dilution

Predicted band size: 69 kDa

Observed band size: 80 kDa



Western blot - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

Radixin/RDX Western blot staining using rabbit Anti-Radixin/RDX antibody

This data was developed using ab52495, the same antibody clone in a different buffer formulation. Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Radixin/RDX antibody [EP1862Y] (ab52495) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse heart tissue lysate at 20 µg

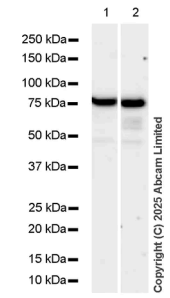
Lane 3:
Mouse spleen tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 68 kDa

Exposure time: 59s



Western blot - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

Radixin/RDX Western blot staining using rabbit Anti-Radixin/RDX antibody

This data was developed using ab52495, the same antibody clone in a different buffer formulation. Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Radixin/RDX antibody [EP1862Y] (ab52495) at 1/1000 dilution

Lane 1:
RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20 µg

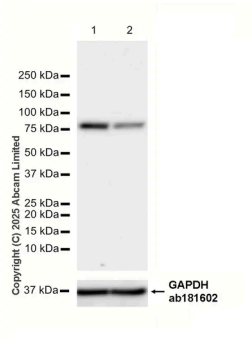
Lane 2:
PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 68 kDa

Exposure time: 68s



Western blot - Anti-Radixin/RDX antibody [EP1862Y] - BSA and Azide free (ab247319)

Radixin/RDX Western blot staining using rabbit Anti-Radixin/RDX antibody

This data was developed using ab52495, the same antibody clone in a different buffer formulation. Blocking and diluting buffer and concentration: 5% NFDM/TBST.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-Radixin/RDX antibody [EP1862Y] (ab52495) at 1/1000 dilution

Lane 1:
RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) transfected with scrambled siRNA control whole cell lysate at 10 µg

Lane 1:
RAW 264.7 transfected with siRNA specifically targeting RDX (Target name) whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 68 kDa

Exposure time: 8s

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