abcam

ab249675

Anti-PPP1R11 antibody [EPR11965] - 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	EPR11965
Purification technique	Affinity purification

Reactivity data

IP

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	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, 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 PPP1R11

Function	Atypical E3 ubiquitin-protein ligase which ubiquitinates TLR2 at 'Lys-754' leading to its degradation by the proteasome. Plays a role in regulating inflammatory cytokine release and gram-positive bacterial clearance by functioning, in part, through the ubiquitination and degradation of TLR2 (PubMed:27805901). Inhibitor of protein phosphatase 1 (PubMed:9843442).

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

ab249675 is the carrier-free version of ab171960.

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	PPP1R11 also known as Protein Phosphatase 1 Regulatory Inhibitor Subunit 11 is a protein that acts as an inhibitor of protein phosphatase 1 (PP1) activity. It weighs approximately 14 kDa and is expressed in various tissues with higher levels in the testis and less in other tissues. Its primary role involves binding to PP1 a critical enzyme in the regulation of phosphorylation states within cells and modulating its activity.
Biological function summary	The protein regulates the phosphorylation process which is vital for cellular functions. PPP1R11 does not work in isolation; it forms part of a complex with PP1 influencing the enzyme's ability to dephosphorylate target substrates. This function is essential in controlling cell division protein synthesis and muscle contractility through its inhibition effect on PP1.
Pathways	PPP1R11 contributes significantly to cellular signaling pathways. It plays a role in the cell cycle regulation pathway and also the glycogen metabolism pathway. Within these pathways it interacts with PP1 and other regulatory proteins to maintain proper cellular functions and energy management. Alterations in these interactions can lead to dysregulation exhibiting the target's importance in cell physiology.
Associated diseases and disorders	The alterations in the function or expression of PPP1R11 link to certain cancers and metabolic conditions. Its connection with PP1 shows a relationship with cancer through irregular cell cycle control. Furthermore its role in glycogen metabolism can relate to disorders like type 2 diabetes highlighting the interaction with insulin-regulatory proteins. Understanding PPP1R11’s function can help develop potential interventions for these conditions.

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.

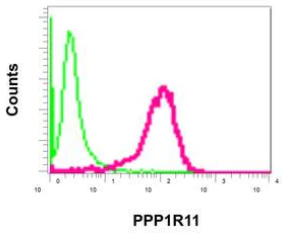
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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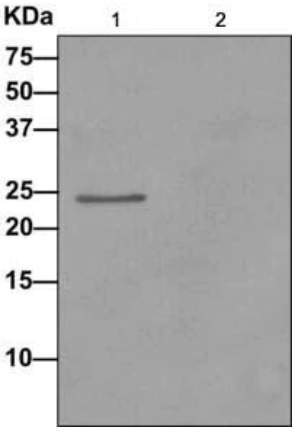
3 product images



Flow Cytometry (Intracellular) - Anti-PPP1R11 antibody [EPR11965] - BSA and Azide free (ab249675)

PPP1R11 Flow Cytometry (Intracellular) staining using rabbit Anti-PPP1R11 antibody

This data was developed using ab171960, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized HeLa cells labeling PPP1R11 with ab171960 at 1/10 dilution (red) or a Rabbit IgG (negative) (green).

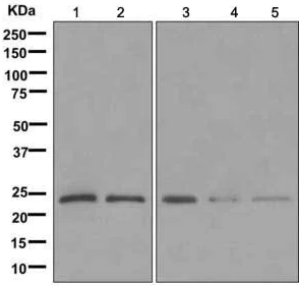


Immunoprecipitation - Anti-PPP1R11 antibody [EPR11965] - BSA and Azide free (ab249675)

This data was developed using ab171960, the same antibody clone in a different buffer formulation.
Western blot analysis on immunoprecipitation pellet from Human testis lysate (1) labeling PPP1R11 with ab171960 at 1/10 dilution or 1X PBS (2) negative control. HRP-conjugated anti-Rabbit IgG preferentially detecting the non-reduced form of Rabbit IgG.

All lanes:
Immunoprecipitation - Anti-PPP1R11 antibody [EPR11965] (ab171960)

Predicted band size: 14 kDa



Western blot - Anti-PPP1R11 antibody [EPR11965] - BSA and Azide free (ab249675)

PPP1R11 Western blot staining using rabbit Anti-PPP1R11 antibody

This data was developed using ab171960, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-PPP1R11 antibody [EPR11965] (ab171960) at 1/1000 dilution

Lane 1:
Human testis lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
Fetal brain tissue lysate at 10 µg

Lane 4:
NIH:OVCAR-3 cell lysate at 10 µg

Lane 5:
MDA-MB-435 lysate at 10 µg

Predicted band size: 14 kDa

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