abcam

ab248779

Anti-ERp18 antibody [EPR9025] - 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	EPR9025
Purification technique	Affinity purification

Reactivity data

WB

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information TXNDC12

Function	Protein-disulfide reductase of the endoplasmic reticulum that promotes disulfide bond formation in client proteins through its thiol-disulfide oxidase activity.

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

ab248779 is the carrier-free version of ab137035.

Species reactivity

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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	ERp18 also known as PDIA6 or Protein Disulfide Isomerase Family A Member 6 is an endoplasmic reticulum (ER) resident protein with a molecular mass of approximately 18 kDa. This protein is known to act as a chaperone and assists in protein folding by catalyzing disulfide bond formation. ERp18 is widely expressed in various tissues particularly in those with high protein synthesis demands such as the liver and pancreas. It localizes mainly within the lumen of the ER.
Biological function summary	ERp18 plays a role in maintaining protein homeostasis. As a member of the protein disulfide isomerase (PDI) family it is involved in the formation and rearrangement of disulfide bonds essential for proper protein architecture. ERp18 functions collaboratively with other PDIs in the ER suggesting it may be part of a larger protein complex. The efficient folding and structural stabilization of proteins are critical for cellular function and survival.

Pathways	ERp18 contributes significantly to the protein-folding pathway and is linked to the unfolded protein response (UPR). The protein is instrumental in mitigating ER stress conditions which arise when there is an accumulation of misfolded proteins. By interacting with other PDI family proteins like PDI itself and ERp72 ERp18 ensures proteins achieve correct configurations which is necessary for maintaining cellular equilibrium and preventing apoptosis.
Associated diseases and disorders	The malfunction or dysregulation of ERp18 associates with certain neurodegenerative diseases such as Alzheimer's disease where protein misfolding plays an important role. Moreover it has connections to cancer where the proliferation of cells often correlates with increased protein synthesis and folding demands. ERp18 interacts with proteins involved in these diseases like amyloid precursor protein (APP) in Alzheimer's and HIF-1α in cancer highlighting its importance in disease contexts.

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

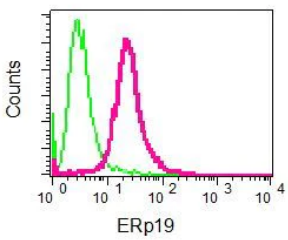
We do not recommend this combination. It is not covered by our product promise.

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.

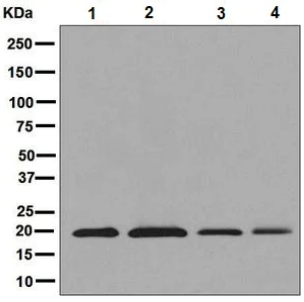
2 product images



Flow Cytometry (Intracellular) - Anti-ERp18 antibody [EPR9025] - BSA and Azide free (ab248779)

ERp18 Flow Cytometry (Intracellular) staining using rabbit Anti-ERp18 antibody

This data was developed using ab137035, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of permeabilized 293T cells labelling ERp18 with ab137035 at 1/10 dilution (Red) or a Rabbit IgG (negative control) (Green).



Western blot - Anti-ERp18 antibody [EPR9025] - BSA and Azide free (ab248779)

ERp18 Western blot staining using rabbit Anti-ERp18 antibody

This data was developed using ab137035, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-ERp18 antibody [EPR9025] (ab137035) at 1/10000 dilution

Lane 1:
293T lysate at 10 µg

Lane 2:
HepG2 lysate at 10 µg

Lane 3:
Y-79 cell lysate at 10 µg

Lane 4:
Human fetal kidney lysates at 10 µg

Secondary

All lanes:
HRP conjugated Goat anti Rabbit IgG at 1/2000 dilution

Predicted band size: 19 kDa

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