abcam

ab248417

Anti-TRAP alpha/TRAPA antibody [EPR5603] - 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	EPR5603
Purification technique	Affinity purification
Concentration	1.02 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

IHC-P

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 SSR1

Function	TRAP proteins are part of a complex whose function is to bind calcium to the ER membrane and thereby regulate the retention of ER resident proteins. May be involved in the recycling of the translocation apparatus after completion of the translocation process or may function as a membrane-bound chaperone facilitating folding of translocated proteins.

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

ab248417 is the carrier-free version of ab133238.

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	TRAP alpha also known as TRAPA or SSR1 is a protein with a mass of approximately 34 kDa. It locates within the endoplasmic reticulum (ER) membrane as a subunit of the translocon-associated protein complex. It has a role in maintaining the translocation of proteins across the endoplasmic reticulum membrane. TRAP alpha is widely expressed in various tissues reflecting its significant function in cellular processes.
Biological function summary	This protein serves as an integral component of the translocon complex facilitating protein transport into the ER. The TRAP complex includes several subunits that work together to ensure protein maturation and folding. TRAP alpha is especially essential for proper protein synthesis and quality control. It plays an important part in cellular homeostasis by ensuring that only correctly assembled proteins proceed to subsequent cellular pathways.
Pathways	TRAP alpha integrates into protein targeting and translocation pathways. It closely engages with the Sec61 complex another fundamental protein in translocation processes. TRAP alpha's role is important in the secretory pathway which directs proteins destined for different organelles or secretion out of the cell. This pathway is interconnected with other cellular processes like the unfolded protein response ensuring cellular adaptation to stress conditions.
Associated diseases and disorders	TRAP alpha associates with pathologies such as cystic fibrosis due to its involvement in protein processing. Mutations in proteins associated with TRAP alpha like CFTR can disrupt proper protein folding and cause disease. Additionally there are links between TRAP alpha and certain neurodegenerative conditions as defects in protein handling and folding within the ER can lead to cell death. Such associations also involve proteins like amyloid precursor protein underlining the importance of TRAP alpha in cellular health and disease prevention.

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

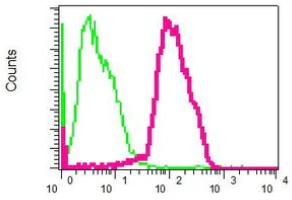
We do not recommend this combination. It is not covered by our product promise.

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.

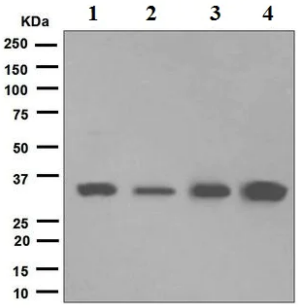
2 product images



Flow Cytometry (Intracellular) - Anti-TRAP alpha/TRAPA antibody [EPR5603] - BSA and Azide free (ab248417)

TRAP alpha/TRAPA Flow Cytometry (Intracellular) staining using rabbit Anti-TRAP alpha/TRAPA antibody

This data was developed using ab133238, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of TRAP alpha/TRAPA in permeabilized HepG2 cells, using ab133238 at a 1/10 dilution (red) or a rabbit IgG (negative) (green).



Western blot - Anti-TRAP alpha/TRAPA antibody [EPR5603] - BSA and Azide free (ab248417)

This data was developed using ab133238, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TRAP alpha/TRAPA antibody [EPR5603] (ab133238) at 1/10000 dilution

Lane 1:
A431 cell lysate at 10 µg

Lane 2:
HL60 cell lysate at 10 µg

Lane 3:
T47D cell lysate at 10 µg

Lane 4:
HepG2 cell lysate at 10 µg

Secondary

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

Predicted band size: 32 kDa

Observed band size: 34 kDa

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