abcam

ab250559

Anti-TSP50 antibody [EPR8675(2)] - 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	EPR8675(2)
Purification technique	Affinity purification
Concentration	1.037 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	-

Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information PRSS50

Function	May be involved in proteolysis through its threonine endopeptidase 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

ab250559 is the carrier-free version of ab181993.

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	TSP50 also known as testis-specific protease 50 is a serine protease with a molecular mass of approximately 53 kDa. This protein is expressed mainly in human testes and has also been observed in certain cancerous tissues. TSP50 shows protease activity which may contribute to its role in cellular processes. While the precise mechanical functions remain not entirely understood TSP50 is involved in the degradation of substrates within cells suggesting a part in protein turnover or processing.
Biological function summary	The action of TSP50 is significant in the regulation of cell growth and differentiation. While not part of a well-defined complex its activity affects cellular homeostasis. The expression pattern of TSP50 mainly restricted to reproductive tissues and some cancer cell types highlights its role in reproductive functions and links to oncogenesis. Its regulation impacts cellular environments possibly promoting proliferation and invasive behavior of cancer cells.
Pathways	TSP50 engages in signaling processes tied to cell cycle regulation and apoptosis. The protein plays a part in pathways related to ubiquitin-dependent proteolysis and might interact with proteins such as p53 a major regulatory protein of the cell cycle and apoptosis. By modulating protein degradation TSP50 can influence cell fate decisions potentially tipping the balance toward growth or death depending on the cellular context.
Associated diseases and disorders	Increased TSP50 expression associates with certain cancers including breast and prostate cancer. Its expression correlates with malignant progression tumor growth and metastasis. TSP50's interaction with proteins like BRCA1 a known factor in breast cancer risk emphasizes its role in tumor biology. These connections suggest that TSP50 could serve as a potential biomarker for cancer diagnosis or a target for therapeutic interventions.

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

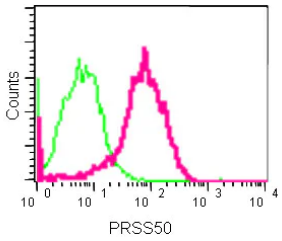
We do not recommend this combination. It is not covered by our product promise.

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.

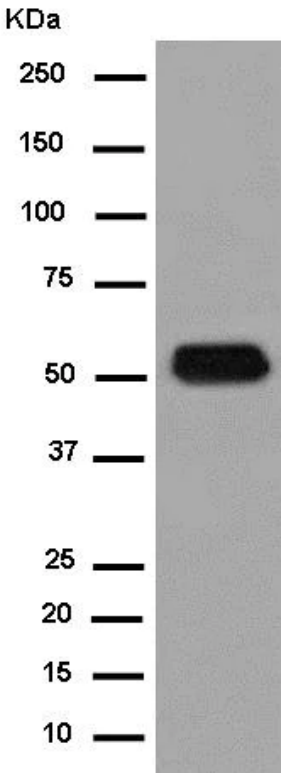
3 product images



Flow Cytometry (Intracellular) - Anti-TSP50 antibody [EPR8675(2)] - BSA and Azide free (ab250559)

TSP50 Flow Cytometry (Intracellular) staining using rabbit Anti-TSP50 antibody

This data was developed using ab181993, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed MCF7 cells labeling TSP50 with ab181993 at a 1/150 dilution, or with a rabbit monoclonal IgG isotype control. Secondary antibody used was goat anti rabbit IgG (FITC) at a 1/150 dilution.



Western blot - Anti-TSP50 antibody [EPR8675(2)] - BSA and Azide free (ab250559)

TSP50 Western blot staining of Human testis tissue lysate using rabbit Anti-TSP50 antibody

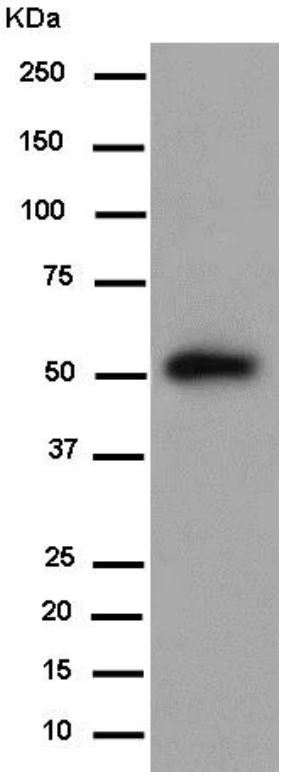
This data was developed using ab181993, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TSP50 antibody [EPR8675(2)] (ab181993) at 1/1000 dilution

All lanes:
Human testis tissue lysate at 10 µg

Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 43 kDa



Western blot - Anti-TSP50 antibody [EPR8675(2)] - BSA and Azide free (ab250559)

TSP50 Western blot staining of MDA-MB-435 cell lysate using rabbit Anti-TSP50 antibody

This data was developed using ab181993, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TSP50 antibody [EPR8675(2)] (ab181993) at 1/1000 dilution

All lanes:
MDA-MB-435 cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 38 kDa, 43 kDa

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