abcam

ab181993

Anti-TSP50 antibody [EPR8675(2)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR8675(2)
Purity	Tissue culture supernatant

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/2000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/150
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information PRSS50

Function	May be involved in proteolysis through its threonine endopeptidase activity.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

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

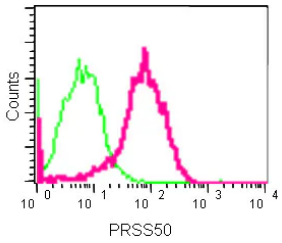
We do not recommend this combination. It is not covered by our product promise.

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.

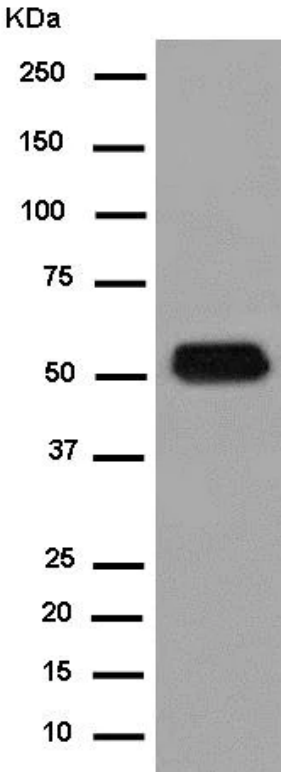
3 product images



Flow Cytometry (Intracellular) - Anti-TSP50 antibody [EPR8675(2)] (ab181993)

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

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed MCF7 cells labeling TSP50with ab181993at 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)] (ab181993)

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

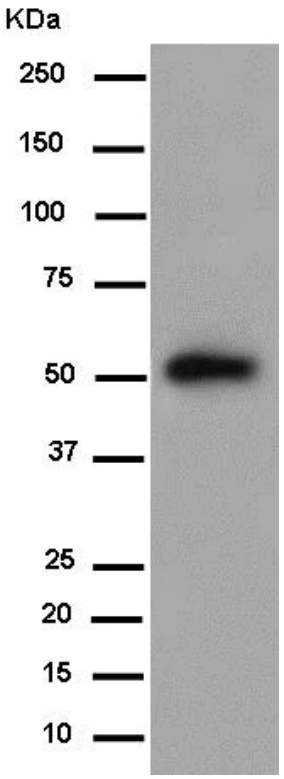
All lanes:
Western blot - Anti-TSP50 antibody [EPR8675(2)] (ab181993) at 1/1000 dilution

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)] (ab181993)

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

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'.