abcam

ab250629

Anti-TPD52 antibody [EPR14220] - 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	EPR14220
Purification technique	Affinity purification Protein A
Specificity	Based on immunogen sequence analysis, this antibody recognizes 4 isoforms with the predicted MWs of 24KDa, 20KDa, 26 KDa and 22KDa, respectively.
Concentration	1.047 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Rat

Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse, Human
Dilution info	-
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information Tumor protein D52

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

ab250629 is the carrier-free version of ab182578.

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	The Tumor Protein D52 (TPD52) is a 224 amino acid protein also known as PrLZ or D52-like protein 1 with a mass of approximately 23 kDa. TPD52 features prominently in the regulation of cell proliferation and vesicle trafficking. It is expressed in a wide range of tissues with significant expression levels in the pancreas prostate and various cancers. TPD52 associates with other members of the D52 family proteins forming homo- or heterodimers that play a part in its function.
Biological function summary	TPD52 is involved in cellular processes like growth apoptosis and exocytosis. It often forms part of protein complexes assisting in intracellular signaling pathways and vesicular transport mechanisms. The ability of TPD52 to interface with other proteins such as 14-3-3 or annexins provides it with diverse functionality. Moreover its involvement in regulating secretory pathways underlines its importance in different cell types particularly those with high secretion activity.
Pathways	TPD52 integrates into the MAPK and calcium signaling pathways. The MAPK pathway which includes key proteins like ERK1/2 involves TPD52 in processes affecting cell growth and differentiation. TPD52 can act upstream or downstream of MAPK components indicating its dynamic role in the pathway. Similarly in calcium signaling TPD52 interacts with annexins which position it within calcium-dependent exocytotic events and cellular responses dependent on Ca2+ dynamics.
Associated diseases and disorders	TPD52 shows an association with cancers such as prostate and breast cancer. In breast cancer its overexpression correlates with rapid tumor growth and decreased patient survival rates. TPD52's link to the protein AKT suggests a role in oncogenic pathways where AKT promotes cell survival and growth. Similarly in

prostate cancer altered expression levels of TPD52 may enhance tumorigenic potential and aggressiveness establishing TPD52 as a potential therapeutic target for cancer treatments.

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

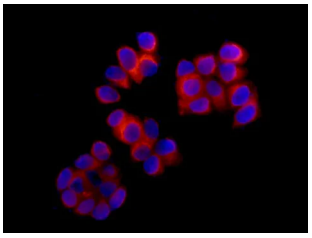
We do not recommend this combination. It is not covered by our product promise.

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.

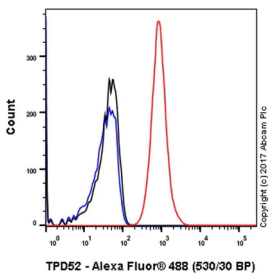
7 product images



Immunocytochemistry/ Immunofluorescence - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

TPD52 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TPD52 antibody

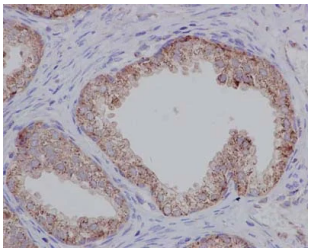
This data was developed using ab182578, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of MCF7 cells labeling TPD52 using ab182578 at 1/500 dilution. A Goat anti rabbit IgG (Alexa Fluor555) at 1/200 dilution was used as secondary antibody. Cells were fixed with 4% paraformaldehyde. Counterstain: DAPI.



Flow Cytometry (Intracellular) - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

TPD52 Flow Cytometry (Intracellular) staining using rabbit Anti-TPD52 antibody

This data was developed using ab182578, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of Raji (human Burkitt's lymphoma) cells labeling TPD52 (red) with ab182578 at a 1/350 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (ab172730). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.

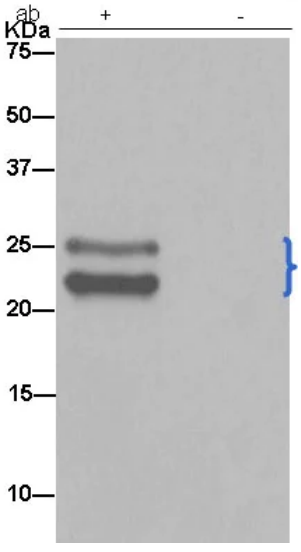


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

TPD52 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TPD52 antibody

This data was developed using ab182578, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human Prostatic hyperplasia tissue labeling TPD52 using ab182578 at 1/100 dilution, followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

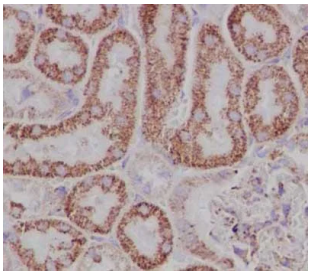


Immunoprecipitation - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

This data was developed using ab182578, the same antibody clone in a different buffer formulation.
Western blot analysis of immunoprecipitation pellet from HCT-116 cell lysate (+) or a negative control (-) immunoprecipitated using ab182578 at 1/50 dilution.
Secondary: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 dilution.

All lanes:
Immunoprecipitation - Anti-TPD52 antibody [EPR14220] (ab182578)

Predicted band size: 24 kDa

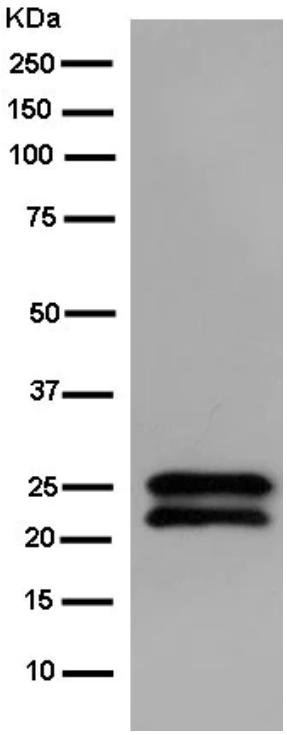


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

TPD52 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-TPD52 antibody

This data was developed using ab182578, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling TPD52 using ab182578 at 1/100 dilution. A Ready to use HRP Polymer for Rabbit IgG (prediluted) was used as secondary. Counterstain: Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Western blot - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

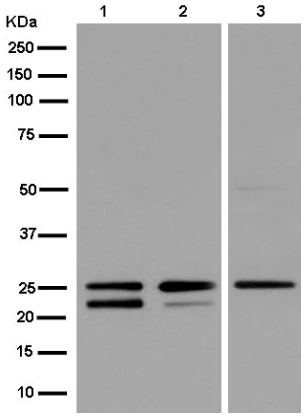
This data was developed using ab182578, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TPD52 antibody [EPR14220] (ab182578) at 1/10000 dilution

All lanes:
SW480 cell lysate at 20 µg

Secondary

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

Predicted band size: 24 kDa



Western blot - Anti-TPD52 antibody [EPR14220] - BSA and Azide free (ab250629)

TPD52 Western blot staining using rabbit Anti-TPD52 antibody

This data was developed using ab182578, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TPD52 antibody [EPR14220] (ab182578) at 1/20000 dilution

Lane 1:
HCT-116 cell lysate at 10 µg

Lane 2:
Raji cell lysate at 10 µg

Lane 3:
THP1 cell lysate at 10 µg

Secondary

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

Predicted band size: 24 kDa

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