abcam

ab250473

Anti-TPD52 antibody [EPR14219] - 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	EPR14219
Purification technique	Affinity purification Protein A
Concentration	1.039 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	-

Notes	Based on the immunogen sequence analysis, ab181260 recognizes 4 isoforms with the predicted MW of 24KDa, 20KDa, 26KDa and 22KDa, respectively.

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
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

ab250473 is the carrier-free version of ab181260.

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.

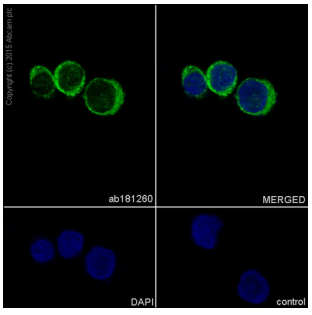
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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6 product images

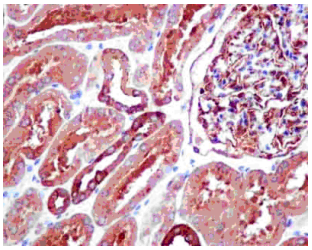


Immunocytochemistry/ Immunofluorescence - Anti-TPD52 antibody [EPR14219] - BSA and Azide free (ab250473)

TPD52 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-TPD52 antibody

This data was developed using ab181260, the same antibody clone in a different buffer formulation.
Immunocytochemistry/Immunofluorescence analysis of THP-1 cells labelling TPD52 with ab181260 at 1/1000. Cells were fixed with 100% Paraformaldehyde. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody.

Control: PBS only.
Nuclear counter stain: DAPI.

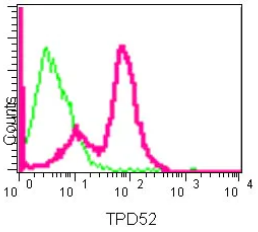


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPD52 antibody [EPR14219] - BSA and Azide free (ab250473)

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

This data was developed using ab181260, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human Kidney tissue labeling TPD52 with ab181260 at 1/100 dilution, followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

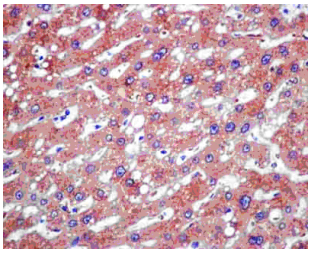
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-TPD52 antibody [EPR14219] - BSA and Azide free (ab250473)

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

This data was developed using ab181260, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of MCF7 cells (2% paraformaldehyde-fixed) labeling TPD52 with ab181260 at 1/10 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.

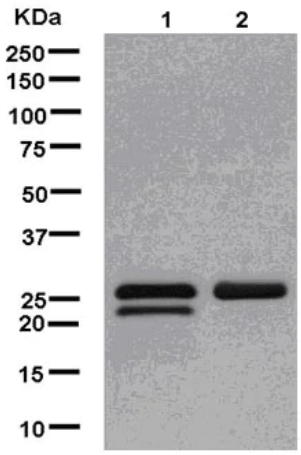


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPD52 antibody [EPR14219] - BSA and Azide free (ab250473)

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

This data was developed using ab181260, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human Liver tissue labeling TPD52 with ab181260 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.



Western blot - Anti-TPD52 antibody [EPR14219] - BSA and Azide free (ab250473)

This data was developed using ab181260, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TPD52 antibody [EPR14219] (ab181260) at 1/2000 dilution

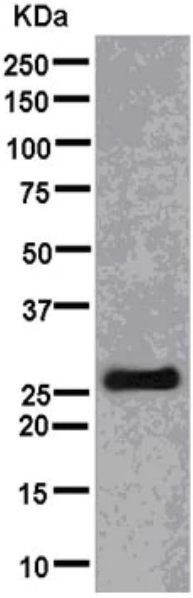
Lane 1:
MCF7 cell lysate at 20 µg

Lane 2:
THP1 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 [EPR14219] - BSA and Azide free (ab250473)

This data was developed using ab181260, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TPD52 antibody [EPR14219] (ab181260) at 1/5000 dilution

All lanes:
Raji 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

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