abcam

ab248524

Anti-TAG1/TAX1 antibody [EPR5106] - 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	EPR5106
Purification technique	Affinity purification Protein A
Dissociation constant	3.02 x 10^{-11} M
Concentration	1.024 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse

Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

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

Predicted

Species	Mouse

Dilution info	-
Notes	-

Target data

See full target information CNTN2

Function	In conjunction with another transmembrane protein, CNTNAP2, contributes to the organization of axonal domains at nodes of Ranvier by maintaining voltage-gated potassium channels at the juxtaparanodal region. May be involved in cell adhesion.

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

ab248524 is the carrier-free version of ab133498.

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.

Species reactivity

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

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	TAG1 also known as TAX1 or contactin-2 is a protein encoded by the CNTN2 gene in humans. It is a member of the immunoglobulin superfamily and has a mass of approximately 140 kDa. TAG1 is expressed in the nervous system particularly in the peripheral and central nervous systems during development. It is predominantly found on neurons influencing axonal guidance and neuronal connectivity.
Biological function summary	TAG1 plays a fundamental role in the nervous system by mediating cell adhesion and signaling. It forms part of a complex often interacting with other cell adhesion molecules to facilitate cellular communication and neurite outgrowth. By influencing neuronal positioning and patterning TAG1 contributes to the proper formation of neural circuits.
Pathways	There is a strong involvement of TAG1 in axonal growth and guidance pathways as well as in the cell adhesion signaling pathway. It directly interacts with proteins such as Caspr and neurofascin which are critical for myelination and the maintenance of the node of Ranvier. These interactions help guide neuron development and function.
Associated diseases and disorders	Altered expression of TAG1 has been linked to several neural disorders including autism spectrum disorders and schizophrenia. In the context of these diseases TAG1 interacts with other proteins such as contactin-associated protein 1 (Caspr1) which plays an important role in maintaining neural network stability and function. Understanding these interactions provides insights into the pathogenesis of these neurological conditions.

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.

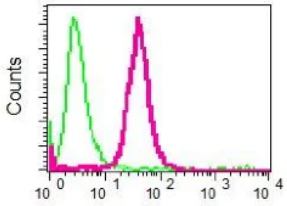
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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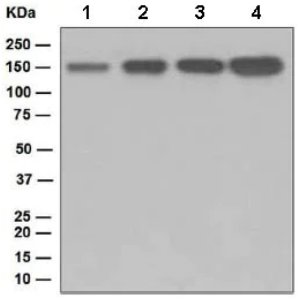
3 product images



Flow Cytometry (Intracellular) - Anti-TAG1/TAX1 antibody [EPR5106] - BSA and Azide free (ab248524)

TAG1/TAX1 Flow Cytometry (Intracellular) staining using rabbit Anti-TAG1/TAX1 antibody

This data was developed using ab133498, the same antibody clone in a different buffer formulation.
Intracellular flow cytometrical analysis of permeablized U87-MG cells using ab133498 at a dilution of 1/10 (red) or a rabbit IgG (negative) (green).



Western blot - Anti-TAG1/TAX1 antibody [EPR5106] - BSA and Azide free (ab248524)

TAG1/TAX1 Western blot staining using rabbit Anti-TAG1/TAX1 antibody

This data was developed using ab133498, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TAG1/TAX1 antibody [EPR5106] (ab133498) at 1/10000 dilution

Lane 1:
Fetal brain tissue lysate at 10 µg

Lane 2:
Human cerebellum lysate at 10 µg

Lane 3:
U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysate at 10 µg

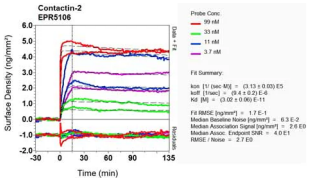
Lane 4:
SH-SY5Y cell lysate at 10 µg

Secondary

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

Predicted band size: 113 kDa

Observed band size: 135 kDa



OI-RD Scanning - Anti-TAG1/TAX1 antibody [EPR5106] - BSA and Azide free (ab248524)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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