

Product datasheet

Anti-TIAM2 antibody [EPR16838] - BSA and Azide free ab232646

Recombinant RabMAb

[4 Images](#)

Overview

Product name	Anti-TIAM2 antibody [EPR16838] - BSA and Azide free
Description	Rabbit monoclonal [EPR16838] to TIAM2 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human gliocytoma tissue.
General notes	<p>ab232646 is the carrier-free version of ab199426.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16838
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab232646 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 193 kDa (predicted molecular weight: 193 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

Function	Modulates the activity of RHO-like proteins and connects extracellular signals to cytoskeletal activities. Acts as a GDP-dissociation stimulator protein that stimulates the GDP-GTP exchange activity of RHO-like GTPases and activates them. Mediates extracellular laminin signals to activate Rac1, contributing to neurite growth. Involved in lamellipodial formation and advancement of the growth cone of embryonic hippocampal neurons. Promotes migration of neurons in the cerebral cortex. When overexpressed, induces membrane ruffling accompanied by the accumulation of actin filaments along the altered plasma membrane (By similarity). Activates specifically RAC1, but not CDC42 and RHOA.
Tissue specificity	Expressed in the occipital, frontal and temporal lobes, cerebellum, putamen and testis.
Sequence similarities	Belongs to the TIAM family. Contains 1 DH (DBL-homology) domain. Contains 1 PDZ (DHR) domain. Contains 2 PH domains. Contains 1 RBD (Ras-binding) domain.
Domain	The PH 1 domain and amino acids 621-782 (a region called TSS; otherwise known as CC-Ex)

are necessary for membrane localization. The PH 1 and TSS domains are necessary for Rac1 activity. The PH 2 domain is engaged in the enhancement of the catalytic activity of the adjacent DH domain. The PH 1, TSS and DH domains are necessary to induce neurite-like structure.

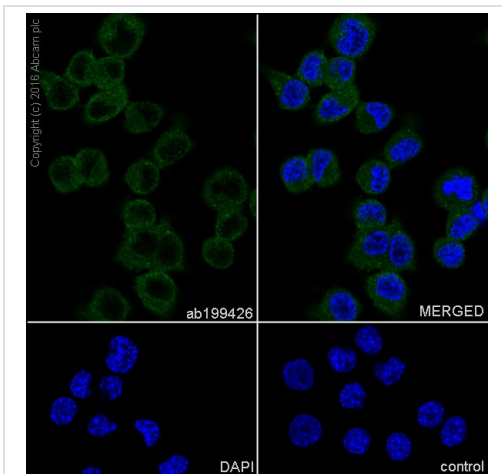
Post-translational modifications

Phosphorylated on serine and threonine residues. Phosphorylated on Thr-1648 by Rho-kinase. Its phosphorylation by Rho-kinase inhibits its guanine nucleotide exchange activity, its interaction with MAP1A, MAP1B, PARP1 and YWHAE and reduces its ability to promote neurite growth.

Cellular localization

Cytoplasm. Cell projection > lamellipodium. Cell projection > filopodium. Cell projection > growth cone. Localizes to the plasma membrane in neurites.

Images



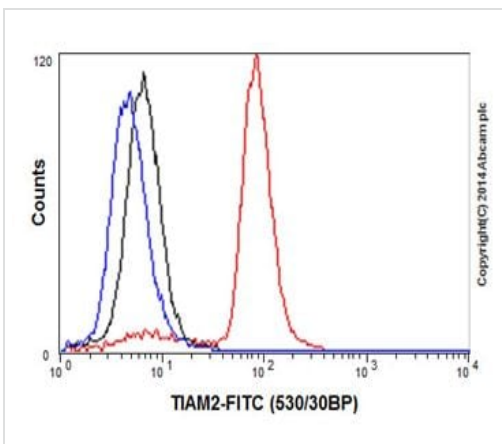
Immunocytochemistry/Immunofluorescence analysis of Raw264.7 cells labelling TIAM2 with [ab199426](#) at 1/500. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. [ab150077](#), an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody.

Control: PBS only.

Nuclear counter stain: DAPI.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab199426](#)).

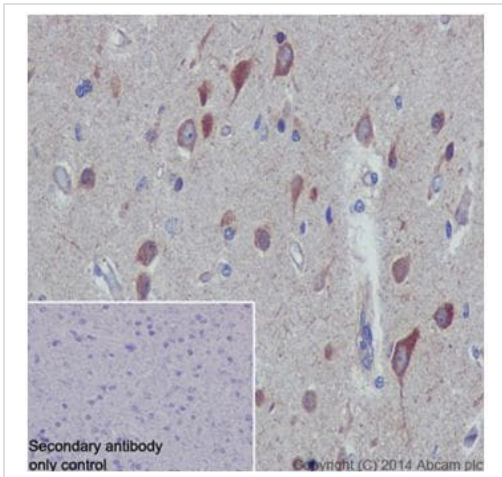
Immunocytochemistry/ Immunofluorescence - Anti-TIAM2 antibody [EPR16838] - BSA and Azide free ([ab232646](#))



Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling U TIAM2 with [ab199426](#) at 1/450 dilution (red). The secondary antibody was Goat anti rabbit IgG (FITC) at 1/150 dilution. The isotype control is Rabbit monoclonal IgG (black) and the cell without incubation with primary antibody and secondary antibody is blue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab199426](#)).

Flow Cytometry (Intracellular) - Anti-TIAM2 antibody [EPR16838] - BSA and Azide free ([ab232646](#))







Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIAM2 antibody [EPR16838] - BSA and Azide free (ab232646)

Immunohistochemical analysis of paraffin-embedded Human gliocytoma tissue labeling TIAM2 with **ab199426** at 1/500 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasm staining on Human gliocytoma tissue is observed. Counter stained with Hematoxylin. Negative control: Used only secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab199426**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-TIAM2 antibody [EPR16838] - BSA and Azide free (ab232646)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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