abcam

Product datasheet

Anti-TIAM2 antibody ab103578

2 Images

Overview

Product name Anti-TIAM2 antibody

Description Rabbit polyclonal to TIAM2

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Immunogen Recombinant full length protein within Human TIAM2 aa 1-650. The exact immunogen sequence

used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific

Support team to discuss your requirements.

Positive control K562 cell lysate; TIAM2 transfected 293T cell lysate

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

found below, along with publications, customer reviews and Q&As

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Constituent: 100% PBS

Purity Protein A purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab103578 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
WB		Use a concentration of 1 - 5 μg/ml. Predicted molecular weight: 71 kDa.

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

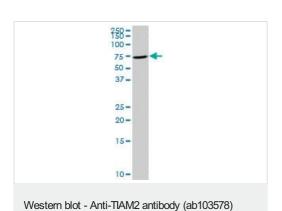
Phosphorylated on serine and threonine residues. Phosphorylated on Thr-1648 by Rho-kinase. Its phosphorylation by Rho-kinase inhibits its guanine nucleotide exchange activity, its interaction with MAP1A, MAP1B, PARP1 and YWHAE and reduces its ability to promote neurite growth.

Cellular localization

 $\label{thm:continuous} \textbf{Cytoplasm. Cell projection > filopodium. Cell projection > growth}$

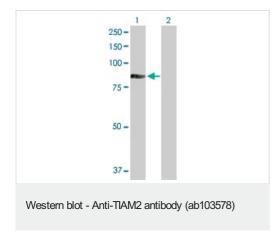
cone. Localizes to the plasma membrane in neurites.

Images



Anti-TIAM2 antibody (ab103578) at 5 μ g/ml + K562 cell lysate at 50 μ g

Predicted band size: 71 kDa



All lanes: Anti-TIAM2 antibody (ab103578) at 5 µg/ml

Lane 1 : TIAM2 transfected 293T cell lysate
Lane 2 : Non-transfected 293T cell lysate

Lysates/proteins at 25 µg per lane.

Predicted band size: 71 kDa

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

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