abcam

Product datasheet

Anti-DAP12 antibody ab93846

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Overview

Immunogen

Product name Anti-DAP12 antibody

Description Rabbit polyclonal to DAP12

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Sheep, Cow, Dog

Synthetic peptide corresponding to Human DAP12 aa 50 to the C-terminus conjugated to keyhole

limpet haemocyanin.

(Peptide available as ab107906)

Positive controlThis antibody gave a positive signal in the following lysates: Lung (Human) Tissue Lysate.

General notes

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

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

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

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Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab93846 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 µg/ml. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).

Application notes Is unsuitable for ICC/IF.

Target

Function Non-covalently associates with activating receptors of the CD300 family. Cross-linking of CD300-

TYROBP complexes results in cellular activation.

Tissue specificity Expressed at low levels in the early development of the hematopoietic system and in the

promonocytic stage and at high levels in mature monocytes. Expressed in hematological cells and tissues such as peripheral blood leukocytes and spleen. Also found in bone marrow, lymph nodes, placenta, lung and liver. Expressed at lower levels in different parts of the brain especially in the

basal ganglia and corpus callosum.

Involvement in disease Defects in TYROBP are a cause of polycystic lipomembranous osteodysplasia with sclerosing

leukoencephalopathy (PLOSL) [MIM:221770]; also called presenile dementia with bone cysts or Nasu-Hakola disease (NHD). PLOSL is a recessively inherited disease characterized by a combination of psychotic symptoms rapidly progressing to presenile dementia and bone cysts restricted to wrists and ankles. PLOSL has a global distribution, although most of the patients have been diagnosed in Finland and Japan, with an estimated population prevalence of 2x10(-6)

in the Finns.

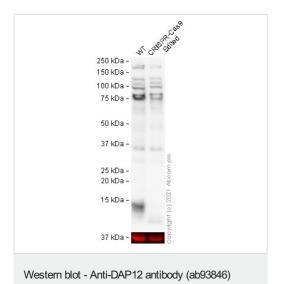
Sequence similaritiesBelongs to the TYROBP family.

Post-translational modifications

Tyrosine phosphorylated.

Cellular localization Membrane.

Images



All lanes: Anti-DAP12 antibody (ab93846) at 1 µg/ml

Lane 1: Wild-type THP-1 cell lysate

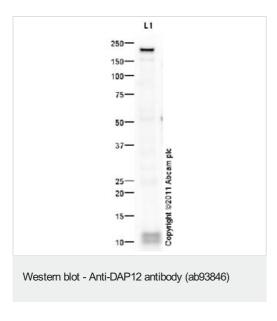
Lane 2: TYROBP CRISPR-Cas9 edited THP-1 cell lysate

Lysates/proteins at 40 µg per lane.

Performed under reducing conditions.

Predicted band size: 12 kDa
Observed band size: 12 kDa

False colour image of Western blot: Anti-DAP12 antibody staining at 1 ug/ml, shown in black; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab93846 was shown to bind specifically to DAP12. A band was observed at 12 kDa in wild-type THP-1 cell lysates with no signal observed at this size in TYROBP CRISPR-Cas9 edited cell line ab273726 (CRISPR-Cas9 edited cell lysate ab273774). The band observed in the CRISPR-Cas9 edited lysate lane below 12 kDa is likely to represent a truncated form of DAP12. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and TYROBP CRISPR-Cas9 edited THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % BSA in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times before development with Optiblot (ECL reagent ab133456) and imaged with 2 minutes exposure time. Secondary antibodies used were HRP conjugated Goat anti-Rabbit (H+L) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.



Anti-DAP12 antibody (ab93846) at 1 μ g/ml + Lung (Human) Tissue Lysate at 10 μ g

Secondary

Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (HRP), pre-adsorbed at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 12 kDa **Observed band size:** 12 kDa

Additional bands at: 200 kDa. We are unsure as to the identity of

these extra bands.

Exposure time: 12 minutes

The DAP12 protein sequence contains a 21-residue signal sequence at the N-terminus. Cleavage of this peptide may account for the doublet observed.

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

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