abcam

Product datasheet

Anti-IRAKM antibody [Y278] - BSA and Azide free ab228417



Recombinant

RabMAb

3 Images

Overview

Product name Anti-IRAKM antibody [Y278] - BSA and Azide free

Description Rabbit monoclonal [Y278] to IRAKM - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Wild-type HAP1 cell lysate.

General notes ab228417 is the carrier-free version of <u>ab32394</u>.

Our <u>carrier-free</u> 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.

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.

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.

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 production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

1

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 Y278

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab228417 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 at an assay dependent concentration. Detects a band of approximately 68 kDa (predicted molecular weight: 68 kDa).

Target

Function Inhibits dissociation of IRAK1 and IRAK4 from the Toll-like receptor signaling complex by either

inhibiting the phosphorylation of IRAK1 and IRAK4 or stabilizing the receptor complex.

Tissue specificity Expressed predominantly in peripheral blood lymphocytes.

Involvement in diseaseDefects in IRAK3 are associated with susceptibility to asthma-related traits type 5 (ASRT5)

[MIM:611064]. Asthma-related traits include clinical symptoms of asthma, such as coughing, wheezing, dyspnea, bronchial hyperresponsiveness as assessed by methacholine challenge test,

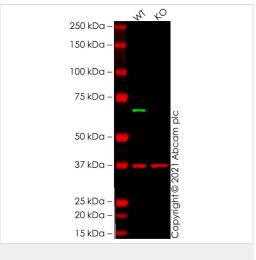
serum IgE levels, atopy, and atopic dermatitis.

Sequence similaritiesBelongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. Pelle subfamily.

Contains 1 death domain.

Contains 1 protein kinase domain.

Images



Western blot - Anti-IRAKM antibody [Y278] - BSA and Azide free (ab228417)

All lanes : Anti-IRAKM antibody [Y278] (ab32394) at 1/20000 dilution

Lane 1: Wild-type THP-1 cell lysate

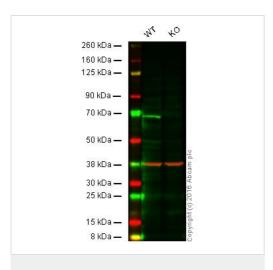
Lane 2: IRAK3 knockout THP-1 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 68 kDa **Observed band size:** 68 kDa

False colour image of Western blot: Anti-IRAKM antibody [Y278] staining at 1/20000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab32394 was shown to bind specifically to IRAKM. A band was observed at 68 kDa in wild-type THP-1 cell lysates with no signal observed at this size in IRAK3 knockout cell line ab281629 (knockout cell lysate ab282979). To generate this image, wild-type and IRAK3 knockout 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 3 % milk 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 then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (ab216776) at 1/20000 dilution.



Western blot - Anti-IRAKM antibody [Y278] - BSA and Azide free (ab228417)

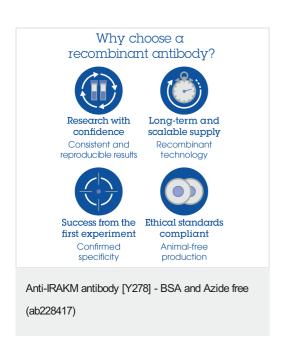
Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: IRAKM knockout HAP1 cell lysate (20 µg)

Lanes 1 - 2: Merged signal (red and green). Green - <u>ab32394</u> observed at 69 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab32394 was shown to specifically react with IRAKM when IRAKM knockout samples were used. Wild-type and IRAKM knockout samples were subjected to SDS-PAGE. ab32394 and ab8245 (loading control to GAPDH) diluted to 1/5000 and 1/10000 respectively were incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32394).



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