# abcam

## Product datasheet

## Anti-IRAK4 antibody [Y279] - BSA and Azide free ab239819



## 4 Images

#### Overview

**Product name** Anti-IRAK4 antibody [Y279] - BSA and Azide free

**Description** Rabbit monoclonal [Y279] to IRAK4 - BSA and Azide free

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), ICC/IF, WB

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

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

Positive control WB: K-562 lysates; ICC/IF: Jurkat cells; Flow Cyt (intra): Jurkat cells.

**General notes** ab239819 is the carrier-free version of ab32511.

> 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased 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<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> 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**.

1

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

#### **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 Y279
Isotype IgG

### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab239819 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.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).

**Application notes** Is unsuitable for IHC-P.

**Target** 

**Function** Required for the efficient recruitment of IRAK1 to the IL-1 receptor complex following IL-1

engagement, triggering intracellular signaling cascades leading to transcriptional up-regulation

and mRNA stabilization. Phosphorylates IRAK1.

**Involvement in disease**Defects in IRAK4 are the cause of recurrent isolated invasive pneumococcal disease type 1

(IPD1) [MIM:610799]. Recurrent invasive pneumococcal disease (IPD) is defined as two episodes of IPD occurring at least 1 month apart, whether caused by the same or different serotypes or strains. Recurrent IPD occurs in at least 2% of patients in most series, making IPD

the most important known risk factor for subsequent IPD.

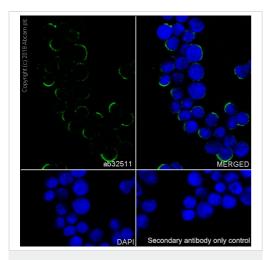
Defects in IRAK4 are the cause of IRAK4 deficiency (IRAK4D) [MIM:607676]. IRAK4 deficiency causes extracellular pyogenic bacterial and fungal infections in otherwise healthy children.

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

Contains 1 death domain.

Contains 1 protein kinase domain.

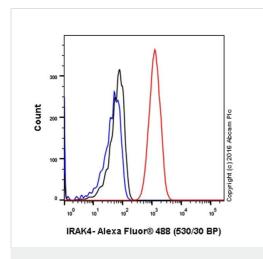
#### **Images**



Immunocytochemistry/ Immunofluorescence - Anti-IRAK4 antibody [Y279] - BSA and Azide free (ab239819)

Immunocytochemistry/ Immunofluorescence analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling IRAK4 with purified <a href="mailto:ab32511">ab32511</a> at 1:500 dilution (2.6 µg/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with none. Goat anti rabbit lgG (Alexa Fluor® 488, <a href="mailto:ab150077">ab150077</a>) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

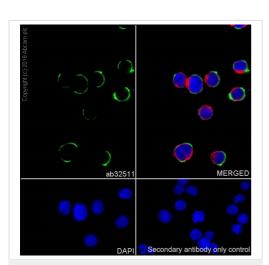
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (anti irak4 antibody y279 immunocytochemistry jurkat human)



Flow Cytometry (Intracellular) - Anti-IRAK4 antibody [Y279] - BSA and Azide free (ab239819)

Intracellular Flow Cytometry analysis of Jurkat (human acute T cell leukemia) cells labeling IRAK4 with purified <a href="mailto:ab32511">ab32511</a> at 1/110 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.

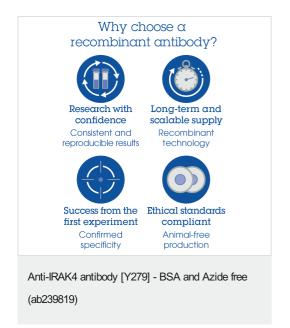
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32511).



Immunocytochemistry/ Immunofluorescence - Anti-IRAK4 antibody [Y279] - BSA and Azide free (ab239819)

Immunocytochemistry/Immunofluorescence analysis of Jurkat (Human T cell leukemia cell line from peripheral blood) cells labeling IRAK4 with <a href="mailto:ab32511">ab32511</a> (unpurified0 at 1/100 dilution. Cells were fixed with 100% methanol. <a href="mailto:ab150077">ab150077</a>, an AlexaFluor® 488 conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. The cells were co-stained with <a href="mailto:ab195889">ab195889</a>, anti-alpha tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution. Nuclei counterstained with DAPI (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32511).



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

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors