# abcam

# Product datasheet

# Anti-IRAK4 antibody ab5985

★★★★★ 2 Abreviews 4 References 5 Images

#### Overview

Product name Anti-IRAK4 antibody

**Description** Rabbit polyclonal to IRAK4

Host species Rabbit

**Specificity** This antibody is specific to IRAK4 and does not cross react with other IRAK proteins.

Tested applications Suitable for: ICC/IF, WB

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide corresponding to Human IRAK4 (C terminal).

(Peptide available as ab39782)

Positive control WB: Daudi, HepG2 and HeLa whole cell lysate. ICC/IF: K562 cells

**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. The product can be stored for up to 12 months.

Storage buffer pH: 7.2

Preservative: 0.02% Sodium azide

Constituent: PBS

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

1

#### The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab5985 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
ICC/IF		Use a concentration of 10 µg/ml.
WB	**** (1)	Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 50 kDa.

#### **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

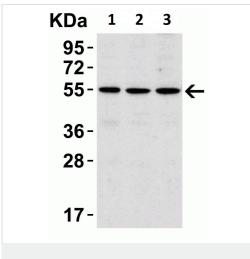
causes extracellular pyogenic bacterial and fungal infections in otherwise healthy children.

**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**



Western blot - Anti-IRAK4 antibody (ab5985)

All lanes: Anti-IRAK4 antibody (ab5985) at 1 µg/ml

Lane 1 : Daudi cell lysate

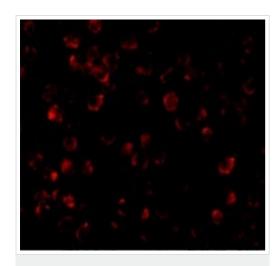
Lane 2: HeLa cell lysate

Lane 3: HepG2 cell lysate

Lysates/proteins at 15 µg per lane.

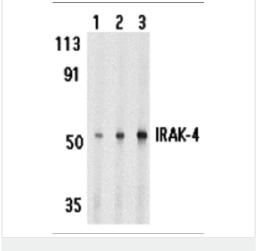
## **Secondary**

All lanes: Goat anti-rabbit IgG HRP conjugate at 1/10000 dilution



Immunocytochemistry/ Immunofluorescence - Anti-IRAK4 antibody (ab5985)

Immunofluorescent analysis of 4% paraformaldehydefixed K562 Cells labeling IRAK4 with <u>ab9585</u> at 10  $\mu$ g/mL, followed by goat anti-rabbit lgG secondary antibody at 1/500 dilution (red).



Western blot - Anti-IRAK4 antibody (ab5985)

Lane 1: Anti-IRAK4 antibody (ab5985) at 1 µg/ml

Lane 2: Anti-IRAK4 antibody (ab5985) at 2 µg/ml

Lane 3: Anti-IRAK4 antibody (ab5985) at 4 µg/ml

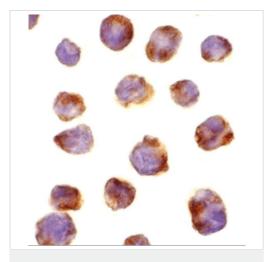
All lanes: HeLa cell lysates

Lysates/proteins at 15 µg per lane.

## Secondary

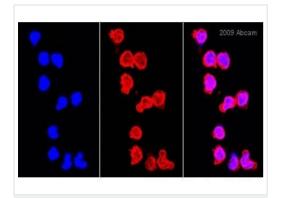
All lanes: Goat anti-rabbit lgG HRP conjugate at 1/10000 dilution

Primary incbation: 1 hour at room temperature in 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-IRAK4 antibody (ab5985)

Immunocytochemical analysis of K562 cells labeling IRAK4 with ab5985 at 10  $\mu$ g/mL. Cells was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-IRAK4 antibody (ab5985)

This image was kindly supplied by Dr Mahesh Shivananjappa by Abreview ab5985 at a 1/100 dilution staining IRAK4 in human PMN cells by Immunocytochemistry/ Immunofluorescence incubated for 4 hours at 37°C. Fixed with PFA. Blocked using 2% BSA for 1 hour at 22°C. Secondary used at 1/250 polyclonal Goat anti-rabbit conjugated to Alexa Fluor 568.

Left image: DAPI staining nuclei (blue)

Middle image: IRAK4 (red)

Right image: Overlay

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- 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				
		5			