

Datasheet: AHP1662

BATCH NUMBER 161017

Description:	RABBIT ANTI HUMAN IRAK4 (C-TERMINAL)
Specificity:	IRAK4 (C-TERMINAL)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen	▪			10ug/ml
Western Blotting	▪			1 - 2ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG - liquid
Antiserum Preparation	Antiserum to IRAK4 was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by chromatography.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.02% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	A peptide corresponding to amino acids at the carboxy terminus of human IRAK4.

**External Database
Links**

UniProt:

[Q9NWZ3](#)

[Related reagents](#)

Entrez Gene:

[51135](#)

IRAK4

[Related reagents](#)

RRID

AB_2126426

Specificity

Rabbit anti Human IRAK4 (C-Terminal) antibody detects an epitope within the C-Terminal (CT) region of integrin-1 receptor-associated kinase 4 (IRAK4). IRAK4 is a 460 amino acid ~50 kDa, cytoplasmic protein and is an important mediator in the signal transduction of Toll-like receptor (TLR) and interleukin-1 (IL-1) receptor family members. IRAK4 functions in this signal transduction pathway by binding to the IL-1 type I receptor following IL-1 engagement, triggering intracellular signalling cascades leading to transcriptional up-regulation and mRNA stabilization. IRAK4 is a key activator of TLR-mediated signal transductions and has crucial roles in innate immune responses. It is expressed by the liver, kidneys and skeletal muscle.

Two isoforms of IRAK4 produced by alternative splicing are predicted, Rabbit anti Human IRAK4 (C-Terminal) antibody is expected to recognize both isoforms which differ by an N-terminal deletion.

Mutations in the IRAK4 gene can lead to the development of Recurrent isolated invasive pneumococcal disease 1 ([IPD1](#)) characterized by multiple episodes of IPD occurring at least one month apart ([Ku et al. 2007](#)). IRAK4 mutation can also lead to the development of IRAK4 deficiency ([IRAK4D](#)) demonstrating extracellular pyogenic bacterial and fungal infections in otherwise healthy children ([Picard et al. 2003](#)).

Western Blotting

AHP1662 detects a band of approximately 50kDa in HeLa cell lysates.

Further Reading

1. Suzuki, N. *et al.* (2002) IRAK-4 as the central TIR signaling mediator in innate immunity. [Trends Immunol. 10: 503-506.](#)
2. Suzuki, N. and Saito, T. (2006) IRAK-4- a shared NF-kappaB activator in innate and acquired immunity. [Trends Immunol. 27: 566-572.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/AHP1662>
10040

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M363988:200529'

Printed on 18 Jan 2024