

## Datasheet: AHP1662

**BATCH NUMBER 150775**

<b>Description:</b>	RABBIT ANTI HUMAN IRAK4 (C-TERMINAL)
<b>Specificity:</b>	IRAK4 (C-TERMINAL)
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Antiserum Preparation</b>	Antiserum to IRAK4 was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by chromatography.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.02% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	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](#)

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**RRID**

AB\_2126426

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**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](#)).

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**Western Blotting**

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

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**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.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety  
Information**

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

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## 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](mailto:antibody_sales_us@bio-rad.com)

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

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