10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# IRAK3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7804a

## Product Information

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|---|---|
| **Application** | IHC-P, WB, E |
| **Primary Accession** | Q9Y616 |
| **Other Accession** | NP_009130 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Rat, Bovine, Canine, Rabbit |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB2344 |
| **Calculated MW** | 67767 |
| **Antigen Region** | 45-77 |

## Additional Information

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| **Gene ID** | 11213 |
| **Other Names** | Interleukin-1 receptor-associated kinase 3, IRAK-3, IL-1 receptor-associated kinase M, IRAK-M, IRAK3 {ECO:0000312\|EMBL:AAH578001} |
| **Target/Specificity** | This IRAK3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 45-77 amino acids from the N-terminal region of human IRAK3. |
| **Dilution** | IHC-P~~1:100 WB~~1:500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | IRAK3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | IRAK3 {ECO:0000312\|EMBL:AAH57800.1} |
| **Function** | Putative inactive protein kinase which regulates signaling downstream of immune receptors including IL1R and Toll-like receptors (PubMed:10383454, |

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| | PubMed:29686383). 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 (By similarity). Upon IL33-induced lung inflammation, positively regulates expression of IL6, CSF3, CXCL2 and CCL5 mRNAs in dendritic cells (PubMed:29686383). |
| **Cellular Location** | Cytoplasm. Nucleus. Note=In dendritic cells, translocates into the nucleus upon IL33 stimulation. {ECO:0000250\|UniProtKB:Q8K4B2} |
| **Tissue Location** | Expressed in eosinophils, dendritic cells and/or monocytes (at protein level) (PubMed:29686383). Expressed predominantly in peripheral blood lymphocytes (PubMed:10383454) |

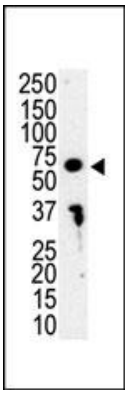
## Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine-like kinase (TLK) group consists of 40 tyrosine and serine-threonine kinases such as MLK (mixed-lineage kinase), LISK (LIMK/TESK), IRAK (interleukin-1 receptor-associated kinase), Raf, RIPK (receptor-interacting protein kinase), and STRK (activin and TGF-beta receptors) families.

## References

Rosati, O., et al., Biochem. Biophys. Res. Commun. 293(5):1472-1477 (2002).
Wesche, H., et al., J. Biol. Chem. 274(27):19403-19410 (1999).

## Images




Western blot analysis of anti-IRAK3 Pab (Cat. #AP7804a) in HL-60 cell lysate. IRAK3 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.