

# IRAK3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7804a

## **Product Information**

ApplicationIHC-P, WB, EPrimary AccessionQ9Y616Other AccessionNP\_009130ReactivityHuman, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB2344Calculated MW67767Antigen Region45-77

## **Additional Information**

**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**

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, PubMed: 20686383). Inhibits dissociation of IRAK1 and IRAK4 from the

PubMed: <u>29686383</u>). 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)

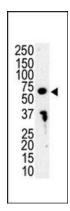
# **Background**

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'.