

**IRAK3 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7804a****Specification**

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**IRAK3 Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession [O9Y616](#)  
Other Accession [NP\\_009130](#)

**IRAK3 Antibody (N-term) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP7804a](/product/products/AP7804a) was selected from the N-term region of human IRAK3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**IRAK3 Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/10383454), PubMed:[29686383](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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)

**IRAK3 Antibody (N-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**IRAK3 Antibody (N-term) Blocking Peptide - Images****IRAK3 Antibody (N-term) Blocking Peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  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.

**IRAK3 Antibody (N-term) Blocking Peptide - 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).