

**Goat Anti-IRAK4 (N Terminus) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1569a

**Specification**

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**Goat Anti-IRAK4 (N Terminus) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O9NWZ3</a>
Other Accession	<a href="#">NP_001107654</a> , <a href="#">51135</a> , <a href="#">266632 (mouse)</a>
Reactivity	Human, Mouse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	51530

**Goat Anti-IRAK4 (N Terminus) Antibody - Additional Information**

**Gene ID** 51135

**Other Names**

Interleukin-1 receptor-associated kinase 4, IRAK-4, 2.7.11.1, Renal carcinoma antigen NY-REN-64, IRAK4

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-IRAK4 (N Terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-IRAK4 (N Terminus) Antibody - Protein Information**

**Name** IRAK4

**Function**

Serine/threonine-protein kinase that plays a critical role in initiating innate immune response against foreign pathogens. Involved in Toll-like receptor (TLR) and IL-1R signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/17878374" target="\_blank">17878374</a>). Is rapidly recruited by MYD88 to the receptor- signaling complex upon TLR activation to form the Myddosome together with IRAK2. Phosphorylates initially IRAK1, thus stimulating the kinase activity and intensive autophosphorylation of IRAK1. Phosphorylates E3 ubiquitin ligases Pellino

proteins (PELI1, PELI2 and PELI3) to promote pellino-mediated polyubiquitination of IRAK1. Then, the ubiquitin-binding domain of IKBKG/NEMO binds to polyubiquitinated IRAK1 bringing together the IRAK1-MAP3K7/TAK1-TRAF6 complex and the NEMO-IKKA-IKKB complex. In turn, MAP3K7/TAK1 activates IKKs (CHUK/IKKA and IKBKB/IKKB) leading to NF-kappa-B nuclear translocation and activation. Alternatively, phosphorylates TIRAP to promote its ubiquitination and subsequent degradation. Phosphorylates NCF1 and regulates NADPH oxidase activation after LPS stimulation suggesting a similar mechanism during microbial infections.

#### **Cellular Location**

Cytoplasm.

#### **Goat Anti-IRAK4 (N Terminus) Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Goat Anti-IRAK4 (N Terminus) Antibody - Images**



AF1569a (1 µg/ml) staining of Hela lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### **Goat Anti-IRAK4 (N Terminus) Antibody - Background**

This gene encodes a kinase that activates NF-kappaB in both the Toll-like receptor (TLR) and T-cell receptor (TCR) signaling pathways. The protein is essential for most innate immune responses. Mutations in this gene result in IRAK4 deficiency and recurrent invasive pneumococcal disease. Multiple transcript variants encoding different isoforms have been found for this gene.

#### **Goat Anti-IRAK4 (N Terminus) Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey

SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Impaired T-cell receptor activation in IL-1 receptor-associated kinase-4-deficient patients. McDonald DR, et al. J Allergy Clin Immunol, 2010 Aug. PMID 20621347.

Dengue hemorrhagic fever is associated with polymorphisms in JAK1. Silva LK, et al. Eur J Hum Genet, 2010 Jun 30. PMID 20588308.

Interleukin-9 polymorphism in infants with respiratory syncytial virus infection: an opposite effect in boys and girls. Schuurhof A, et al. Pediatr Pulmonol, 2010 Jun. PMID 20503287.

Helical assembly in the MyD88-IRAK4-IRAK2 complex in TLR/IL-1R signalling. Lin SC, et al. Nature, 2010 Jun 17. PMID 20485341.