

IRAK4 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12875a**Specification**

IRAK4 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q9NWZ3](#)**IRAK4 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 51135**Other Names**

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

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.

IRAK4 Antibody (N-term) Blocking peptide - 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:17878374). 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.

IRAK4 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

IRAK4 Antibody (N-term) Blocking peptide - Images

IRAK4 Antibody (N-term) Blocking peptide - 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 immuneresponses. 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.

IRAK4 Antibody (N-term) Blocking peptide - References

Silva, L.K., et al. Eur. J. Hum. Genet. 18(11):1221-1227(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) McDonald, D.R., et al. J. Allergy Clin. Immunol. 126(2):332-337(2010) Schuurhof, A., et al. Pediatr. Pulmonol. 45(6):608-613(2010) Wang, Z., et al. Structure 14(12):1835-1844(2006)