

IRAK4 Antibody

Rabbit mAb Catalog # AP91346

Specification

IRAK4 Antibody - Product Information

Application WB, IHC, FC, ICC

Primary Accession O9NWZ3
Clonality Monoclonal

Other Names

IL-1 receptor-associated kinase 4; Interleukin 1 receptor associated kinase 4 mutant form 1; IPD1;

IRAK4; LOC 51135; NY REN 64; REN64;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 51530 Da

IRAK4 Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500 FC~~1:10~50

ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

IRAK4

Description Required for the efficient recruitment of

IRAK1 to the IL-1 receptor complex following IL-1 engagement, triggering intracellular signaling cascades leading to transcriptional up-regulation and mRNA stabilization. Phosphorylates IRAK1.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

IRAK4 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: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.

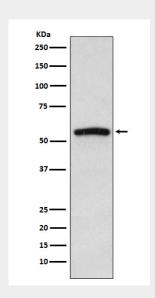
Cellular Location Cytoplasm.

IRAK4 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IRAK4 Antibody - Images



Western blot analysis of IRAK4 expression in Jurkat cell lysate.