

IRAK4 / IRAK-4 Antibody (N-Terminus)
Goat Polyclonal Antibody
Catalog # ALS13634**Specification**

IRAK4 / IRAK-4 Antibody (N-Terminus) - Product Information

Application	IHC
Primary Accession	O9NWZ3
Reactivity	Human, Monkey, Horse
Host	Goat
Clonality	Polyclonal
Calculated MW	52kDa KDa

IRAK4 / IRAK-4 Antibody (N-Terminus) - 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

Target/Specificity

Human IRAK4.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

IRAK4 / IRAK-4 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

IRAK4 / IRAK-4 Antibody (N-Terminus) - 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

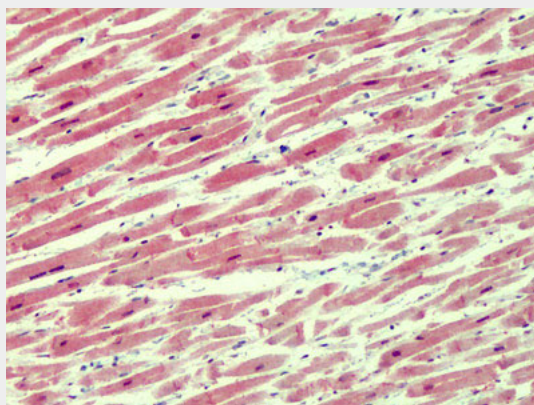
Cytoplasm.

IRAK4 / IRAK-4 Antibody (N-Terminus) - Protocols

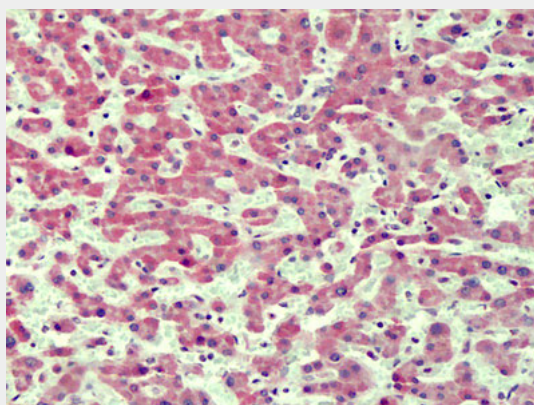
Provided below are standard protocols that you may find useful for product applications.

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

IRAK4 / IRAK-4 Antibody (N-Terminus) - Images



Anti-IRAK4 antibody IHC of human heart.



Anti-IRAK4 antibody IHC of human liver.

IRAK4 / IRAK-4 Antibody (N-Terminus) - Background

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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.

IRAK4 / IRAK-4 Antibody (N-Terminus) - References

Li S.,et al.Proc. Natl. Acad. Sci. U.S.A. 99:5567-5572(2002).
Scanlan M.J.,et al.Int. J. Cancer 83:456-464(1999).
Chuang T.H.,et al.Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Scherer S.E.,et al.Nature 440:346-351(2006).