10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Irak4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14148b

Specification

Mouse Irak4 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q8R4K2
Other Accession	NP_084202.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**50872**
Antigen Region	**422-449**

Mouse Irak4 Antibody (C-term) - Additional Information

Gene ID 266632

Other Names
Interleukin-1 receptor-associated kinase 4, IRAK-4, Irak4

Target/Specificity
This Mouse Irak4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 422-449 amino acids from the C-terminal region of mouse Irak4.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
Mouse Irak4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Irak4 Antibody (C-term) - 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. 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 (By similarity).

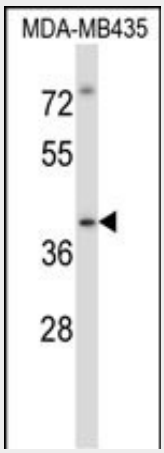
Cellular Location
Cytoplasm.

Mouse Irak4 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Irak4 Antibody (C-term) - Images



Mouse Irak4 Antibody (C-term) (Cat. #AP14148b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the Irak4 antibody detected the Irak4 protein (arrow).

Mouse Irak4 Antibody (C-term) - Background

Irak4 is 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 (By similarity).

Mouse Irak4 Antibody (C-term) - References

Erdman, L.K., et al. J. Immunol. 183(10):6452-6459(2009)
Maekawa, Y., et al. Circulation 120(14):1401-1414(2009)
Bauernfeind, F.G., et al. J. Immunol. 183(2):787-791(2009)
Staschke, K.A., et al. J. Immunol. 183(1):568-577(2009)
Koziczak-Holbro, M., et al. Arthritis Rheum. 60(6):1661-1671(2009)