

IRAK-M Antibody

Catalog # ASC10127

Specification

IRAK-M Antibody - Product Information

Application
Primary Accession
Other Accession

Reactivity Host Clonality

Isotype

Calculated MW

WB, IHC, IF 09Y616

NP 009130, 5225377

Human, Mouse, Rat

Rabbit Polyclonal

IgG

Predicted: 66 kDa

Observed: 70 kDa KDa

Application Notes IRAK-M antibody can be used for detection

of IRAK-M by Western blot at 1 μ g/mL. IRAK-M antibody can also detect IRAK-M by immunohistochemistry at 2 μ g/mL. For immunofluorescence start at 10 μ g/mL.

IRAK-M Antibody - Additional Information

Gene ID 11213

Other Names

IRAK-M Antibody: ASRT5, IRAKM, Interleukin-1 receptor-associated kinase 3, IL-1 receptor-associated kinase M, IRAK-3, interleukin-1 receptor-associated kinase 3

Target/Specificity

IRAK3; IRAK-M antibody is predicted to have no cross reactivity to other members of the IRAK family.

Reconstitution & Storage

IRAK-M antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

IRAK-M Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IRAK-M Antibody - Protein Information

Name IRAK3 {ECO:0000312|EMBL:AAH57800.1}

Function

Putative inactive protein kinase which regulates signaling downstream of immune receptors including IL1R and Toll-like receptors (PubMed:10383454, PubMed:<a





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href="http://www.uniprot.org/citations/29686383" target=" blank">29686383). Inhibits dissociation of IRAK1 and IRAK4 from the Toll-like receptor signaling complex by either inhibiting the phosphorylation of IRAK1 and IRAK4 or stabilizing the receptor complex (By similarity). Upon IL33-induced lung inflammation, positively regulates expression of IL6, CSF3, CXCL2 and CCL5 mRNAs in dendritic cells (PubMed: 29686383).

Cellular Location

Cytoplasm. Nucleus. Note=In dendritic cells, translocates into the nucleus upon IL33 stimulation. {ECO:0000250|UniProtKB:Q8K4B2}

Tissue Location

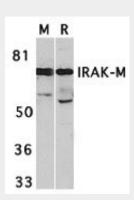
Expressed in eosinophils, dendritic cells and/or monocytes (at protein level) (PubMed:29686383). Expressed predominantly in peripheral blood lymphocytes (PubMed:10383454)

IRAK-M Antibody - Protocols

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

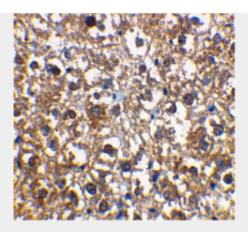
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IRAK-M Antibody - Images

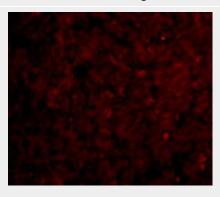


Western blot analysis of IRAK-M in (M) mouse spleen and (R) rat liver tissue lysates with IRAK-M antibody at 1 µg/mL.





Immunohistochemical staining of rat liver tissue using IRAK-M antibody at 2 μg/mL.



Immunofluorescence of IRAK-M in Rat Liver tissue with IRAK-M antibody at 10 μg/mL.

IRAK-M Antibody - Background

IRAK-M Antibody: Interleukin-1 (IL-1) and lipopolysaccharide (LPS) induces cellular response through IL-1 receptor (IL-1R) and Toll like receptors (TLR). IL-1 receptor-associated kinase (IRAK and IRAK2) mediates the activation of NF-betaB by IL-1/Toll receptors, which is a pivotal transcription factor mediating inflammatory and immune response. A novel member in the IRAK/Pelle family was recently identified and designated IRAK-M. IRAKs associate with IL-1/Toll receptors after IL-1 or LPS stimulation and the dominant negative mutants of IRAKs inhibit IL-1 or LPS induced NF-betaB activation. Members in IRAK/Pelle family play a central role in IL-1R/TLR mediated inflammatory responses to cytokine IL-1 and LPS.

IRAK-M Antibody - References

Cao Z, Henzel WJ, and Gao X. IRAK: a kinase associated with the interleukin-1 receptor. Science 1996; 271:1128-31.

Muzio M, Ni J, Feng P, et al. IRAK (Pelle) family member IRAK-2 and MyD88 as proximal mediators of IL-1 signaling. Science 1997; 278:1612-5.

Wesche H, Gao X, Li X, et al. IRAK-M is a novel member of the Pelle/interleukin-1 receptor-associated kinase (IRAK) family. J. Biol. Chem. 1999; 274:19403-10.