

IRAK-M Antibody

Catalog # ASC10127

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9Y616
Other Accession	NP_009130 , 5225377
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	67767
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
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.

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.

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: 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)

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.

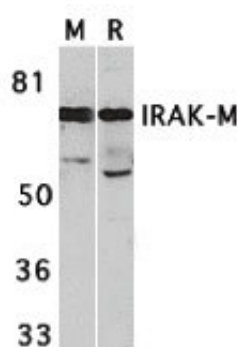
References

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

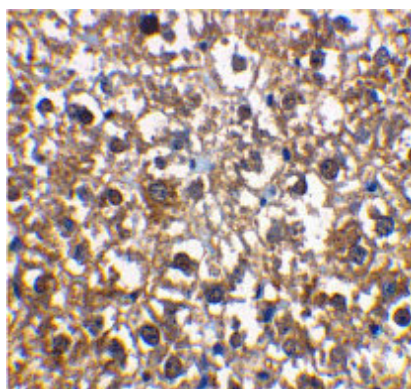
Muzio M, Ni J, Feng P, et al. IRAK (Pelle) family member IRAK-2 and MyD88 as proximal mediators of IL-1 signaling. *Science* 1997; 278:1612-5.

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.

Images

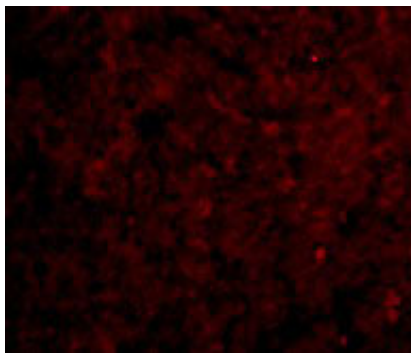


Western blot analysis of IRAK-M in (M) mouse spleen and (R) rat liver tissue lysates with IRAK-M antibody at 1 µg/mL.



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.



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