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

IRAK-2 Antibody

Catalog # ASC10083

Product Information

Application	WB, IF, E
Primary Accession	O43187
Other Accession	AF026273, 2653876
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	69433
Conjugate	Unconjugated
Application Notes	IRAK-2 antibody can be used for detection of IRAK2 by Western blot 0.5 □g/mL. A 65 kDa band can be detected. Antibody can also be used for immunoflourescence starting at 10 □g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID	3656
Other Names	IRAK-2 Antibody: IRAK-2, Interleukin-1 receptor-associated kinase-like 2, IRAK-2, interleukin-1 receptor-associated kinase 2
Target/Specificity	IRAK2; Anti-IRAK2 has no cross response to IRAK.
Reconstitution & Storage	IRAK-2 antibody can be stored at 4℃ for three months and -20℃, 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-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	IRAK2
Function	Binds to the IL-1 type I receptor following IL-1 engagement, triggering intracellular signaling cascades leading to transcriptional up-regulation and mRNA stabilization.
Tissue Location	Expressed in spleen, thymus, prostate, lung, liver, skeletal muscle, kidney, pancreas and peripheral blood leukocytes

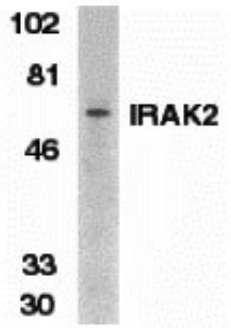
Background

IRAK-2 Antibody: The pro-inflammatory cytokine IL-1 induces cellular response through two subunits of its receptor, IL-1 receptor I (IL-1RI) and IL-1 receptor accessory protein (IL-1RAcP). IL-1 receptor-associated kinase (IRAK) mediates activation of NF-κB, which is a pivotal transcription factor mediating inflammatory and immune response. A novel member in the IRAK/Pelle family was recently identified and designated IRAK2. Both IRAK and IRAK2 recruit to the subunits of the IL-1R complex after IL-1 binding and lead to NF-κB activation. IRAKs also associate with Toll-like receptor (TLR) and the dominant negative mutants of IRAKs inhibit LPS-induced NF-κB activation. Members in IRAK/Pelle family play a central role in IL-1R and TLR mediated inflammatory responses to cytokine IL-1 and LPS. IRAK2 is expressed in a variety of human tissues.

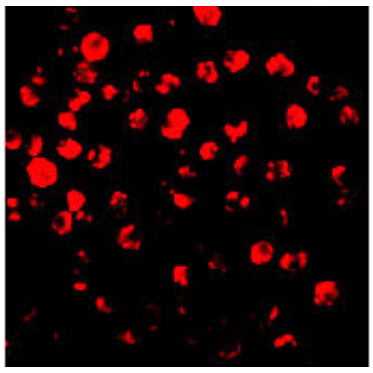
References

Cao Z; Henzel WJ; Gao X. IRAK: a kinase associated with the interleukin-1 receptor. Science 1996;271:1128-31.
Muzio M, Ni J, Feng P, Dixit VM. IRAK (Pelle) family member IRAK-2 and MyD88 as proximal mediators of IL-1 signaling. Science 1997;278:1612-5
Zhang FX, Kirschning CJ, Mancinelli R, Xu XP, Jin Y, Faure E, Mantovani A, Rothe M, Muzio M, Arditi M. Bacterial lipopolysaccharide activates nuclear factor-κB through interleukin-1 signaling mediators in cultured human dermal endothelial cells and mononuclear phagocytes. J Biol Chem 1999;274:7611-4
Yang RB, Mark MR, Gurney AL , Godowski PJ. Signaling events induced by lipopolysaccharide-activated toll-like receptor 2. J Immunol 1999;163:639-43 (RD0300)

Images

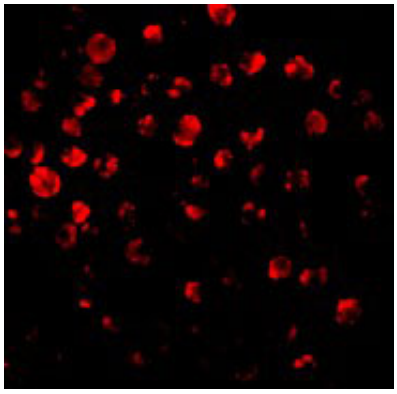


Western blot analysis of IRAK2 in K562 whole cell lysate with IRAK2 antibody at 1:500 dilution.



Immunofluorescence of IRAK2 in HeLa cells with IRAK antibody at 10 µg/mL.

Immunofluorescence of IRAK-2 in Hela cells with IRAK-2 antibody at 20 µg/mL.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.