

**IRAK-2 Antibody**  
**Catalog # ASC10063****Specification**

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**IRAK-2 Antibody - Product Information**

Application	WB, IF, ICC, E
Primary Accession	<a href="#">O43187</a>
Other Accession	<a href="#">AF026273</a> , <a href="#">2653876</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	65 kDa KDa
Application Notes	IRAK-2 antibody can be used for detection of IRAK2 by Western blot at 2 µg/mL. A 65 kDa band should be detected. This polyclonal antibody can also detect IRAK2 by immunocytochemistry at 2 µg/mL. For immunofluorescence start at 10 µg/mL.

**IRAK-2 Antibody - 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°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-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**IRAK-2 Antibody - 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

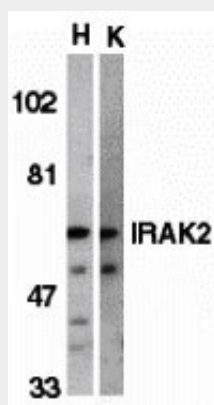
peripheral blood leukocytes

### **IRAK-2 Antibody - Protocols**

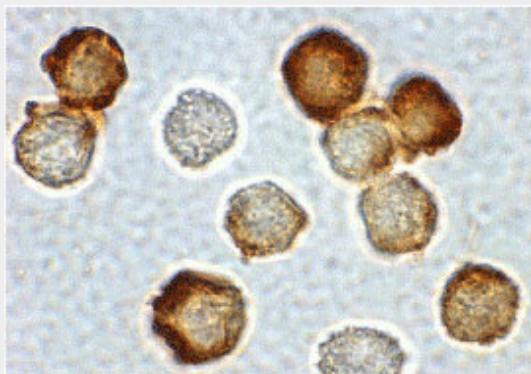
Provided below are standard protocols that you may find useful for product applications.

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

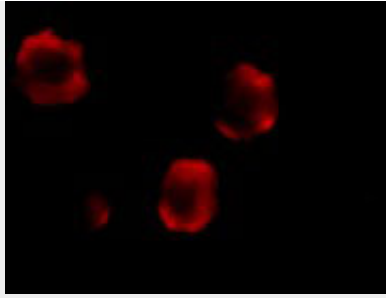
### **IRAK-2 Antibody - Images**



Western blot analysis of IRAK2 in HeLa (H) and K562 (K) whole cell lysate with IRAK2 antibody (C2) at 2 µg/mL.



Immunocytochemical staining of HeLa cells using IRAK2 antibody at 2 µg/mL.



Immunofluorescence of IRAK-2 in Hela cells with IRAK-2 antibody at 10 µg/mL.

### **IRAK-2 Antibody - 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 response. IRAK2 is expressed in a variety of human tissues.

### **IRAK-2 Antibody - References**

- 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. (RD1299)