

## **IRAK-2 Antibody**

Catalog # ASC10063

#### **Specification**

## **IRAK-2 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Calculated MW Application Notes WB, ICC, IF 043187

AF026273, 2653876

Human Rabbit Polyclonal

IgG

65 kDa KDa

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



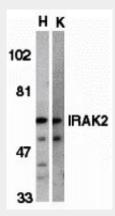
peripheral blood leukocytes

# **IRAK-2 Antibody - Protocols**

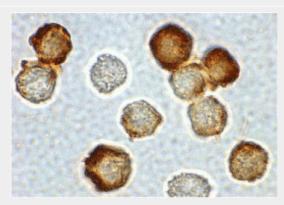
Provided below are standard protocols that you may find useful for product applications.

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

# IRAK-2 Antibody - Images

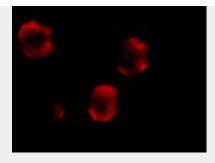


Western blot analysis of IRAK2 in HeLa (H) and K562 (K) whole cell lysate with IRAK2 antibody (C2) at 2  $\mu$ g/mL.



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  $\mu g/mL$ .

### 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-kB 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)