

## Anti-IRAK2 (CT)

**CATALOG No.:** PX145A      **SIZE:** 100 µg  
    PX145B      **SIZE:** 0.5 mg

### BACKGROUND:

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 (1), 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 (2). 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 (3,4). 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.

### SOURCE:

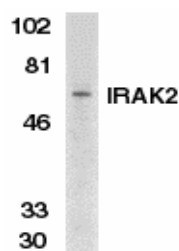
Rabbit anti-IRAK2 (CT) polyclonal antibody was raised against a peptide corresponding to amino acids 571 to 590 of human IRAK2 (2).

### APPLICATION:

This polyclonal antibody can be used for detection of IRAK2 by Western blot at 1:500 to 1:1000 dilution. K562 whole cell lysate can be used as positive control and a 65 kDa band can be detected. Anti-IRAK2 has no cross response to IRAK. For research use only.

### STORAGE:

It is supplied as chromatography purified IgG, 100 µg in 200 µl of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of IRAK2 in K562 whole cell lysate with anti-IRAK2 (CT) at 1:500 dilution.

### REFERENCES:

1. Cao Z; Henzel WJ; Gao X. IRAK: a kinase associated with the interleukin-1 receptor. *Science* 1996;271:1128-31.
2. 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
3. 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-kappaB through interleukin-1 signaling mediators in cultured human dermal endothelial cells and mononuclear phagocytes. *J Biol Chem* 1999;274:7611-4
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

**CAUTION:** NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.



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