



IRAK-1 (phospho Thr100) Polyclonal Antibody

Catalog No	YP-Ab-14481
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	IRAK1
Immunogen	The antiserum was produced against synthesized peptide derived from human IRAK1 around the phosphorylation site of Thr100. AA range:66-115
Specificity	Phospho-IRAK-1 (T100) Polyclonal Antibody detects endogenous levels of IRAK-1 protein only when phosphorylated at T100.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	EC:2.7.11.1;Interleukin-1 receptor-associated kinase 1;IRAK;IRAK 1;IRAK-1;IRAK1
Observed Band	77kD
Calculated Molecular Weight	77kD
Cell Pathway	Cytoplasm . Nucleus . Lipid droplet . Translocates to the nucleus when sumoylated. RSAD2/viperin recruits it to the lipid droplet (By similarity). .
Tissue Specificity	Isoform 1 and isoform 2 are ubiquitously expressed in all tissues examined, with isoform 1 being more strongly expressed than isoform 2.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium.,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. Isoform 1 binds rapidly but is then degraded allowing isoform 2 to mediate a slower, more sustained response to the cytokine. Isoform 2 is inactive suggesting that the kinase activity of this enzyme is not required for IL-1 signaling. Once phosphorylated, IRAK1 recruits the adapter protein PELI1.,PTM:Autophosphorylated or is transphosphorylated by IRAK4 following recruitment to the IL-1RI. In the case of isoform 1, this is



linked to ubiquitination and degradation.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. Pelle subfamily.,similarity:

Background

This gene encodes the interleukin-1 receptor-associated kinase 1, one of two putative serine/threonine kinases that become associated with the interleukin-1 receptor (IL1R) upon stimulation. This gene is partially responsible for IL1-induced upregulation of the transcription factor NF-kappa B. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

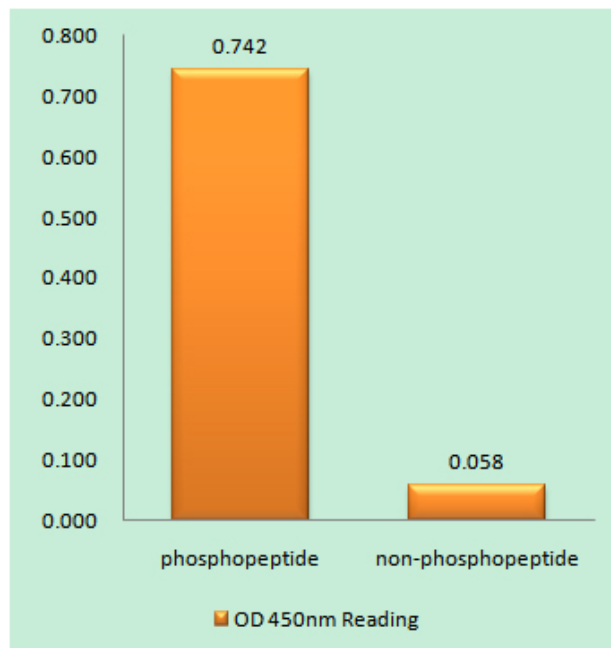
matters needing attention

Avoid repeated freezing and thawing!

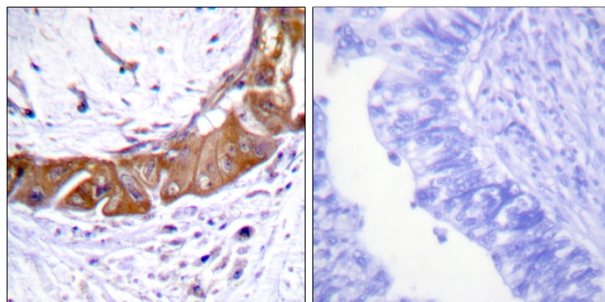
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

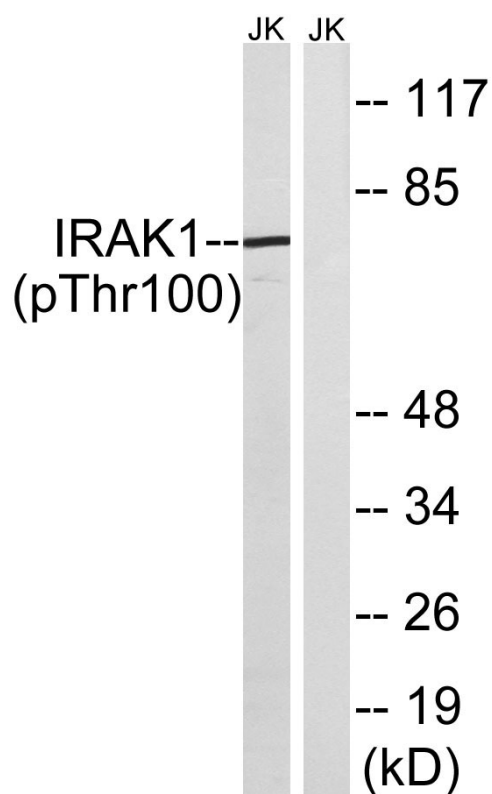
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRAK1 (Phospho-Thr100) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using IRAK1 (Phospho-Thr100) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from Jurkat cells treated with heat shock, using IRAK1 (Phospho-Thr100) Antibody. The lane on the right is blocked with the phospho peptide.