
Product Name: IRAK-1 (phospho Thr100) Rabbit Polyclonal Antibody**Catalog #: APRab04865**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight	77kDa

Antigen Information

Gene Name	IRAK1
Alternative Names	IRAK1; IRAK; Interleukin-1 receptor-associated kinase 1; IRAK-1
Gene ID	3654.0
SwissProt ID	P51617
Immunogen	The antiserum was produced against synthesized peptide derived from human IRAK1 around the phosphorylation site of Thr100. AA range:66-115

Background

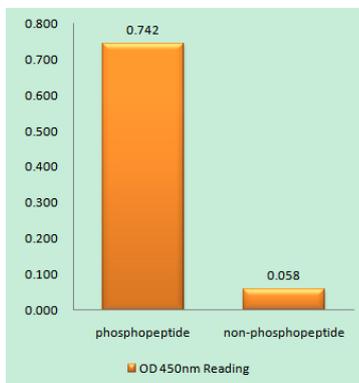
This gene encodes the interleukin-1 receptor-associated kinase 1, one of two putative serine/threonine kinases that become

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],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:Contains 1 protein kinase domain.,subunit:IL-1 stimulation leads to the formation of a signaling complex which dissociates from the IL-1 receptor following the binding of PELI1. Interacts with IL1RL1. Interacts with IRAK1BP1.,tissue specificity:Isoform 1 and isoform 2 are ubiquitously expressed in all tissues examined, with isoform 1 being more strongly expressed than isoform 2.,

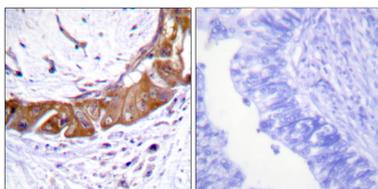
Research Area

Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Toll_Like;Neurotrophin;

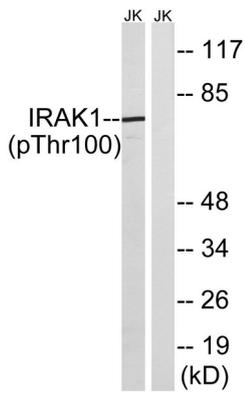
Image Data



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 phospho peptide.



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.