Best Tools for immunology Research

IRAK-1 (phospho Thr209) Polyclonal Antibody

Catalog No :	YP0371
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA;IHC
Target :	IRAK-1
Fields :	>>MAPK signaling pathway;>>NF-kappa B signaling pathway;>>Toll-like receptor signaling pathway;>>Neurotrophin signaling pathway;>>Alcoholic liver disease;>>Pathogenic Escherichia coli infection;>>Salmonella infection;>>Pertussis;>>Yersinia infection;>>Leishmaniasis;>>Chagas disease;>>Toxoplasmosis;>>Tuberculosis;>>Hepatitis B;>>Measles;>>Herpes simplex virus 1 infection;>>Epstein-Barr virus infection;>>Human immunodeficiency virus 1 infection;>>Coronavirus disease - COVID-19;>>Lipid and atherosclerosis
Gene Name :	IRAK1
Protein Name :	Interleukin-1 receptor-associated kinase 1
Human Gene Id :	3654
Human Swiss Prot No :	P51617
Mouse Swiss Prot No :	Q62406
Immunogen :	The antiserum was produced against synthesized peptide derived from human IRAK1 around the phosphorylation site of Thr209. AA range:175-224
Specificity :	Phospho-IRAK-1 (T209) Polyclonal Antibody detects endogenous levels of IRAK-1 protein only when phosphorylated at T209.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 77kD

Cell Pathway : Apoptosis_Inhibition;Apoptosis_Mitochondrial;Apoptosis_Overview;Toll_Like;Neurotrophin;

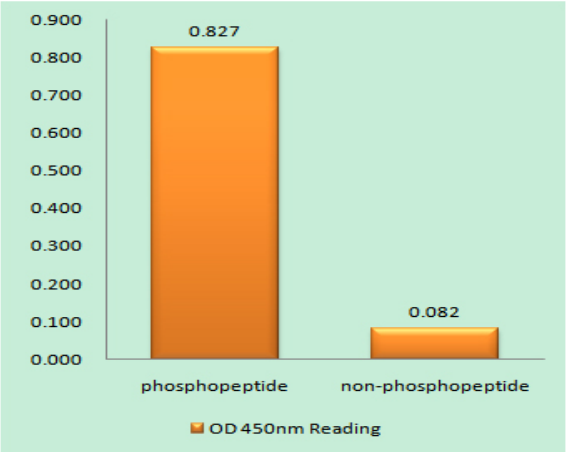
Background : This gene encodes the interleukin-1 receptor-associated kinase 1, one of two putative serine/threonine kinases that become associated with the interleukin-1 receptor (IL1R) upon stimulation. This gene is partially responsible for IL1-induced upregulation of the transcription factor NF-kappa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

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:

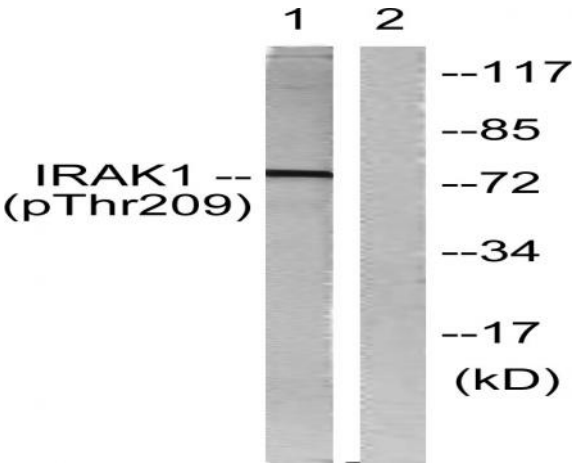
Subcellular Location : Cytoplasm . Nucleus . Lipid droplet . Translocates to the nucleus when sumoylated. RSAD2/viperin recruits it to the lipid droplet (By similarity). .

Expression : Isoform 1 and isoform 2 are ubiquitously expressed in all tissues examined, with isoform 1 being more strongly expressed than isoform 2.

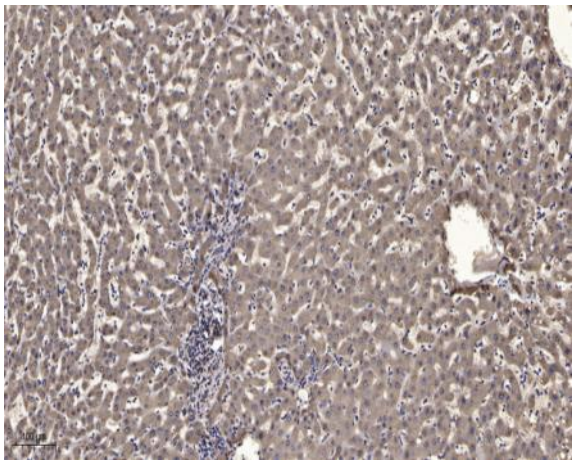
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using IRAK1 (Phospho-Thr209) Antibody



Western blot analysis of lysates from HeLa cells, using IRAK1 (Phospho-Thr209) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human liver cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).