



IRAK-1 Rabbit mAb

Catalog No	YP-rAb-17408
Isotype	IgG
Reactivity	Human
Applications	WB,IF,IP,ELISA
Gene Name	IRAK1
Protein Name	Interleukin-1 receptor-associated kinase 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	IRAK 1;Interleukin-1 receptor-associated kinase 1;IRAK1 ; IRAK ; Interleukin-1 receptor-associated kinase 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: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.

Background

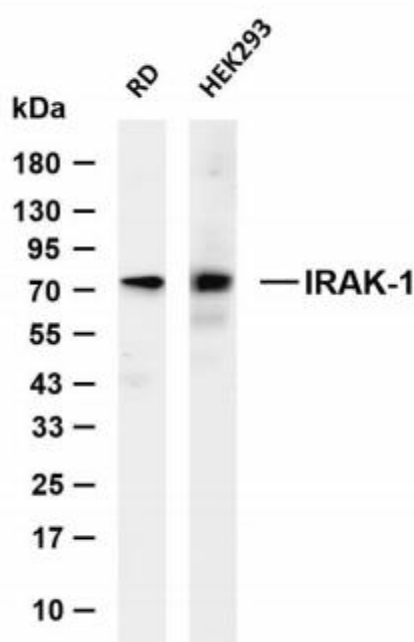
This gene encodes the interleukin-1 receptor-associated kinase 1, one of two putative serine/threonine kinases that become associated with the interleukin-1 receptor (IL1R) upon stimulation. This gene is partially responsible for IL1-induced upregulation of the transcription factor NF-kappa B. Alternatively 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!

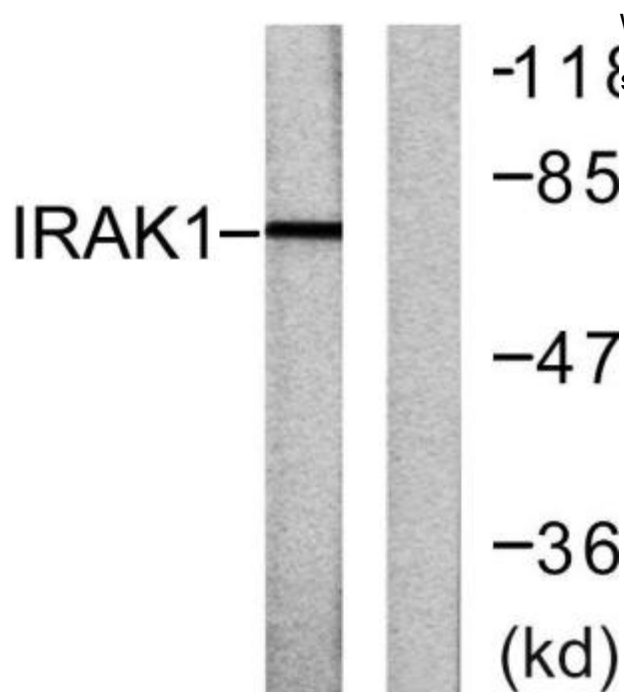
Usage suggestions

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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-IRAK-1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: RD Lane 2: HEK293 Predicted band size: 77kDa Observed band size: 77kDa





Western blot analysis of lysates from HeLa cells, using IRAK1 Antibody. The lane on the right is blocked with the synthesized peptide.

