



Datasheet for ABIN742658
anti-IRAK1 antibody (pThr209)



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4 Images

Overview

Quantity:	100 µL
Target:	IRAK1
Binding Specificity:	pThr209
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IRAK1 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human IRAK1 around the phosphorylation site of Thr209 [RG(p-T)HN]
Isotype:	IgG
Specificity:	This phosphorylation site is homologous to Thr209 in Mouse and Rat.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	IRAK1
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Target Details

Alternative Name: [IRAK1 \(IRAK1 Products\)](#)

Background: Synonyms: IRAK, pelle, Interleukin-1 receptor-associated kinase 1, IRAK-1, IRAK1
Background: Serine/threonine-protein kinase that plays a critical role in initiating innate immune response against foreign pathogens. Involved in Toll-like receptor (TLR) and IL-1R signaling pathways. Is rapidly recruited by MYD88 to the receptor-signaling complex upon TLR activation. Association with MYD88 leads to IRAK1 phosphorylation by IRAK4 and subsequent autophosphorylation and kinase activation. Phosphorylates E3 ubiquitin ligases Pellino proteins (PELI1, PELI2 and PELI3) to promote pellino-mediated polyubiquitination of IRAK1. Then, the ubiquitin-binding domain of IKBKG/NEMO binds to polyubiquitinated IRAK1 bringing together the IRAK1-MAP3K7/TAK1-TRAF6 complex and the NEMO-IKKA-IKKB complex. In turn, MAP3K7/TAK1 activates IKKs (CHUK/IKKA and IKBKB/IKKB) leading to NF-kappa-B nuclear translocation and activation. Alternatively, phosphorylates TIRAP to promote its ubiquitination and subsequent degradation. Phosphorylates the interferon regulatory factor 7 (IRF7) to induce its activation and translocation to the nucleus, resulting in transcriptional activation of type I IFN genes, which drive the cell in an antiviral state. When sumoylated, translocates to the nucleus and phosphorylates STAT3.

Gene ID: 3654

UniProt: [P51617](#)

Pathways: [NF-kappaB Signaling](#), [TLR Signaling](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Cellular Response to Molecule of Bacterial Origin](#), [Toll-Like Receptors Cascades](#)

Application Details

Application Notes: WB 1:300-5000
FCM 1:20-100
IHC-P 1:200-400
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

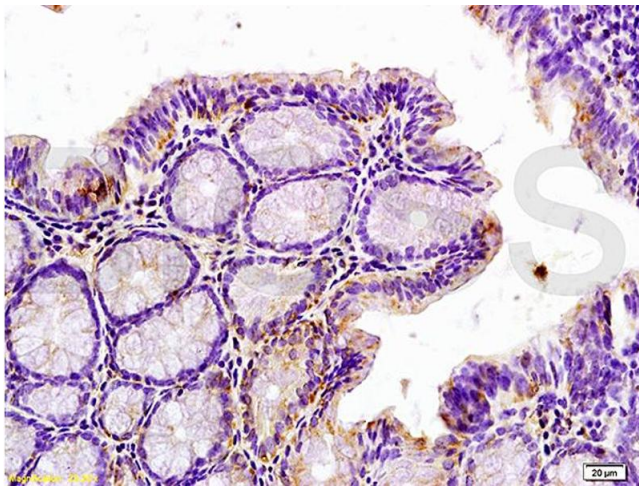
Format: Liquid

Concentration: 1 µg/µL

Handling

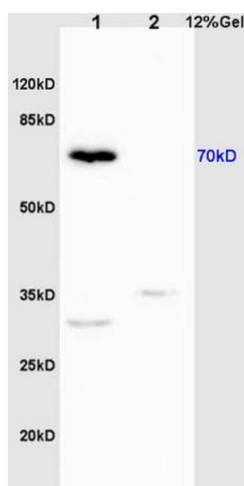
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Images



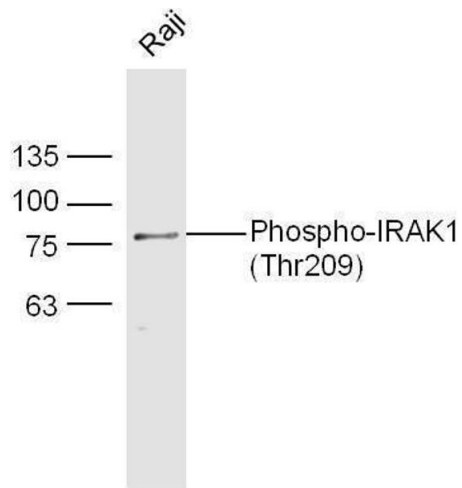
Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat colitis tissue labeled with Anti-Phospho-IRAK1 (Thr209) Polyclonal Antibody, Unconjugated (ABIN742658) at 1:200 followed by conjugation to the secondary antibody and DAB staining



SDS-PAGE

Image 2. L1 mouse liver lysates L2 rat brain lysates probed with Anti Phospho-IRAK1 (Thr209) Polyclonal Antibody, Unconjugated (ABIN742658) at 1:200 overnight at 4 °C. Followed by conjugation to secondary antibody at 1:3000 for 90 min at 37 °C. Predicted band 41kD. Observed band size:70kD.



Western Blotting

Image 3. Raji cell lysates probed with Rabbit Anti-IRAK1 (Thr209) Polyclonal Antibody, Unconjugated at 1:500 for 90 min at 37°C.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN742658.