

## IRAK1 (Phospho-Thr209) Antibody FITC Conjugated

Catalog No: #C04534F

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## Description

Product Name	IRAK1 (Phospho-Thr209) Antibody FITC Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	Flow-Cyt
Species Reactivity	HuB RtB
Immunogen Description	KLH conjugated synthetic phosphopeptide aa 170-220 712 derived from human IRAK1 around the phosphorylation site of Thr209 [RG(p-T)HN]
Conjugates	FITC
Target Name	IRAK1 Thr209
Other Names	IRAK; pelle; Interleukin-1 receptor-associated kinase 1; IRAK-1; IRAK1
Accession No.	Swiss-Prot#P51617NCBI Gene ID3654
Uniprot	P51617
GeneID	3654;
Excitation Emission	494nm 518nm
Cell Localization	Cytoplasm, Nucleus
Concentration	1mg ml
Formulation	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

## Application Details

Flow-Cyt=1:50-200B

## 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.

Note: This product is for in vitro research use only