IRAK4(Phospho-Thr345) Antibody FITC Conjugated

Catalog No: #C00648F



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	Support: tech@signalwayantibody.com
Product Name	IRAK4(Phospho-Thr345) Antibody FITC Conjugated
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Purified by Protein A.
Applications	IF
Species Reactivity	Hu Ms Rt
Immunogen Description	KLH conjugated Synthesised phosphopeptide aroubd 330-360 460 derived from human IRAK4 around the
	phosphorylation site of Thr345
Conjugates	FITC
Target Name	IRAK4(Thr345)
Other Names	IPD1; REN64; IRAK-4; NY-REN-64; Interleukin-1 receptor-associated kinase 4; Renal carcinoma antigen
	NY-REN-64; IRAK4
Accession No.	Swiss-Prot#Q9NWZ3NCBI Gene ID51135
Uniprot	Q9NWZ3
GeneID	51135;
Excitation Emission	494nm 518nm
Cell Localization	Cytoplasm
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

IF=1:50-200

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 to form the Myddosome together with IRAK2. Phosphorylates initially IRAK1, thus stimulating the kinase activity and intensive autophosphorylation of IRAK1. 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 NCF1 and regulates NADPH oxidase activation after LPS stimulation suggesting a similar mechanism during microbial infections.

Note: This product is for in vitro research use only