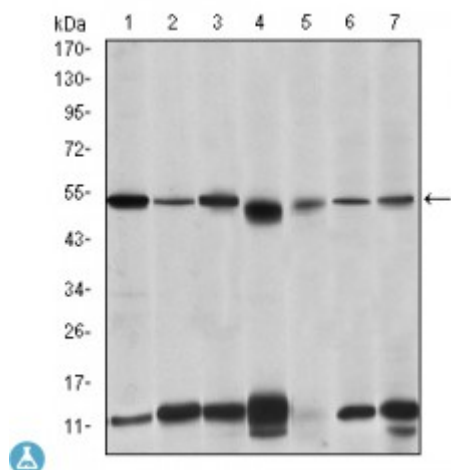


Anti-IRAK-4 antibody



Description

Mouse monoclonal to IRAK-4.

Model	STJ98182
Host	Mouse
Reactivity	Human, Mouse, Simian
Applications	ELISA, FC, IHC, WB
Immunogen	Purified recombinant fragment of human IRAK-4 expressed in E. Coli.
Gene Symbol	IRAK4
Dilution range	WB 1:500-1:2000IHC 1:200-1:1000FC 1:200-1:400ELISA 1:10000
Specificity	IRAK-4 Monoclonal Antibody detects endogenous levels of IRAK-4 protein.
Purification	Affinity purification
Clone ID	2H9
Note	For Research Use Only (RUO).
Protein Name	Interleukin-1 receptor-associated kinase 4 IRAK-4 Renal carcinoma antigen NY-REN-64
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Ascitic fluid containing 0.03% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.

Alternative Names	Interleukin-1 receptor-associated kinase 4 IRAK-4 Renal carcinoma antigen NY-REN-64
Function	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.
Cellular Localization	Cytoplasm
Post-translational Modifications	Phosphorylated.