For Research Use Only

IRAK1 Recombinant antibody

Catalog Number:86068-3-RR



Purification Method:

Protein A purification

CloneNo.:

250691C5

Basic Information

Catalog Number: GenBank Accession Number:

86068-3-RR BC014963 GeneID (NCBI):

100ul , Concentration: 1000 $\mu g/ml$ by 3654 Nanodrop: **UNIPROT ID:** Recommended Dilutions: P51617 WB: 1:2000-1:10000

Rabbit Full Name:

Isotype: interleukin-1 receptor-associated

kinase 1 IgG

Immunogen Catalog Number: Calculated MW: AG0728 77 kDa

> Observed MW: 68-80 kDa

Applications

Tested Applications:

WB, ELISA WB: HeLa cells, PC-12 cells, HEK-293 cells, A549 cells,

Positive Controls:

Species Specificity: MCF-7 cells, Jurkat cells

human, rat

Background Information

Interleukin-1 receptor-associated kinases (IRAKs) are a unique family of death domain containing protein kinases that play a key role in initiating innate immune response against foreign pathogens. They are involved in Toll-like receptor (TLR) and interleukin-1 receptor (IL-1R) signaling pathways. IRAK1 is the first member of this kinase family. Upon ligand binding to TLR/IL-1R, IRAK1 is recruited by MYD88 to the receptor-signaling complex, the association leads to IRAK1 phosphorylation by IRAK4 and subsequent autophosphorylation and kinase activation. Hyperphosphorylated IRAK1 then disengages from the receptor complex, and forms a cytosolic IRAK1-TRAF6 complex. TRAF6 then interacts with TAK and TAB, resulting in eventual activation of the NF-кB and MAPK pathways. Phosphorylated IRAK1 also undergoes ubiquitin-mediated degradation or sumoylation, which results in nuclear translocation and transcriptional activation of inflammatory target genes. (PMID: 17890055; 12620219)

Storage

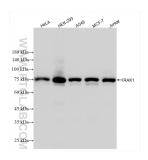
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

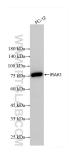
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

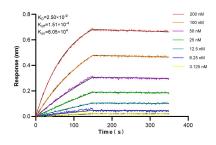
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 86068-3-RR (IRAK1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



PC-12 cells were subjected to SDS PAGE followed by western blot with 86068-3-RR (IRAK1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 86068-3-RR against Human IRAK1 were performed. The affinity constant is 2.50 nM.