For Research Use Only

IRAK1 Recombinant antibody, PBS Only

Catalog Number:86068-3-PBS

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Uni-rAb
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Basic Information

Catalog Number:
86068-3-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0728

GenBank Accession Number:
BC014963

GeneID (NCBI):
3654

UNIPROT ID:
P51617

Full Name:
interleukin-1 receptor-associated kinase 1

Calculated MW:
77 kDa

Observed MW:
68-80 kDa

Purification Method:
Protein A purification

CloneNo.:
250691C5

Applications

Tested Applications:
WB, IF/ICC, Indirect ELISA

Species Specificity:
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. Hyper-phosphorylated 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-κB 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)

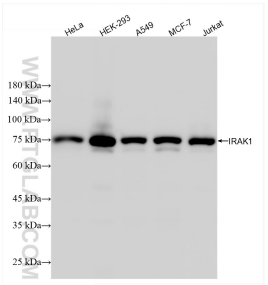
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

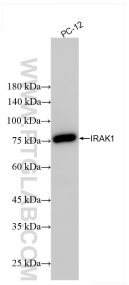
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

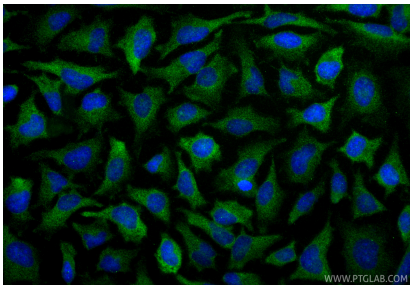
Selected Validation Data



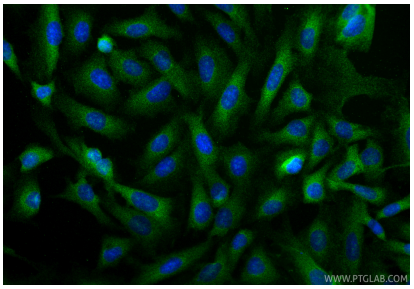
Various lysates were subjected to SDS PAGE followed by western blot with 86068-3-RR (IRAK1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86068-3-PBS in a different storage buffer formulation.



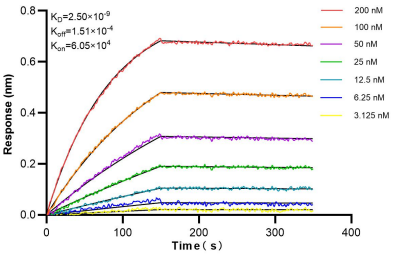
PC-12 cells were subjected to SDS PAGE followed by western blot with 86068-3-RR (IRAK1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86068-3-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using IRAK1 antibody (86068-3-RR, Clone: 250691C5) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 86068-3-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed SKOV-3 cells using IRAK1 antibody (86068-3-RR, Clone: 250691C5) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 86068-3-PBS in a different storage buffer formulation.



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