

For Research Use Only

CoraLite® Plus 488-conjugated IRAK1 Polyclonal antibody

Catalog Number: CL488-10478

Featured Product



Basic Information

Catalog Number:

CL488-10478

Size:

100ul, Concentration: 1000 ug/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:

Antigen affinity purification

Recommended Dilutions:

IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Species Specificity:

human, mouse, rat

Positive Controls:

IF/ICC : HeLa cells,

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- κ B 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 -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

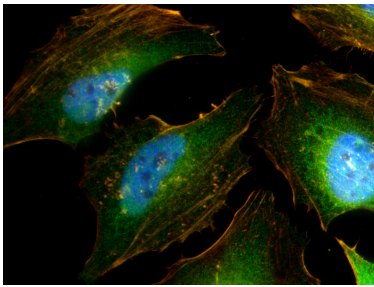
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

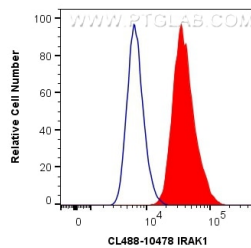
E: proteintech@ptglab.com
W: ptglab.com

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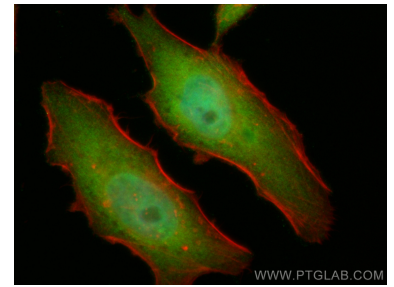
Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® Plus 488 IRAK1 antibody (CL488-10478) at dilution of 1:100, CL555-Phalloidin (orange).



1X10⁶ HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human IRAK1 (CL488-10478) (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CoraLite® Plus 488 IRAK1 antibody (CL488-10478) at dilution of 1:200, CL594-phalloidin (red).