### For Research Use Only

# CoraLite® Plus 488-conjugated IRAK1 Polyclonal antibody

Catalog Number: CL488-10478

**Featured Product** 

## **Basic Information**

CL488-10478 Size: 1000 µ g/ml Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG0728

Catalog Number:

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 1:50-1:500 Excitation/Emission maxima wavelengths: 493 nm / 522 nm

**Applications** 

Tested Applications: FC (Intra), IF/ICC Species Specificity: human, mouse, rat

# Positive Controls:

IF : 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. 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- $\kappa$ 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. Storage Buffer: PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3. Aliquoting is unnecessary for -20°C storage

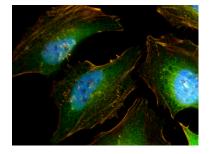
 For technical support and original validation data for this product please contact:

 T: 4006900926
 E: Proteintech-CN@ptglab.com
 W: ptgcn.com

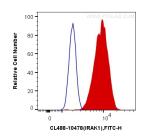
This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.



### 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).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug CoraLite® Plus 488 Anti-Human IRAK1 (CL488-10478) (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).