

For Research Use Only

# CoraLite® Plus 488-conjugated cGAS Recombinant antibody

Catalog Number: CL488-84045



## Basic Information

Catalog Number: CL488-84045	GenBank Accession Number: BC145651	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 214763	CloneNo.: 240964E2
Source: Rabbit	UNIPROT ID: Q8C6L5	Recommended Dilutions: IF/ICC 1:50-1:500
Isotype: IgG	Full Name: RIKEN cDNA E330016A19 gene	Excitation/Emission maxima wavelengths: 493 nm / 522 nm
Immunogen Catalog Number: AG31677	Calculated MW: 58 kDa	
	Observed MW: 58 kDa	

## Applications

Tested Applications: IF/ICC	Positive Controls: IF/ICC : RAW 264.7 cells,
Species Specificity: mouse	

## Background Information

cGAS (cyclic GMP-AMP synthase) is a cytosolic DNA sensor that serves to mount an immune response against the invasion of microbial pathogens such as viruses. cGAS normally resides as an inactive protein in the cell. Upon binding to DNA, cGAS undergoes a conformational change to an active state and produces the second messenger cyclic GMP-AMP (cGAMP) from ATP and GTP, which is subsequently detected by the cyclic-dinucleotide sensor STING, an ~40 kDa dimeric transmembrane protein at the endoplasmic reticulum (ER). cGAS not only is found in the cytosol but has a multifaceted cellular distribution that involves localization at the cell membrane and in the nucleus (PMID: 32424334). The calculated molecular weight of cGAS is 58 kDa. With post-translational modification, the MW of cGAS will be migrated to 70 kDa.

## Storage

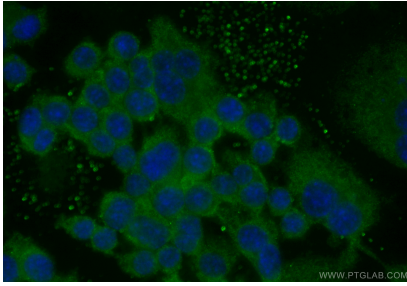
**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:  
T: 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 (-20°C Ethanol) fixed RAW 264.7 cells using CoraLite® Plus 488 cGAS antibody (CL488-84045, Clone: 240964E2 ) at dilution of 1:200, CL594-Phalloidin (red).