

For Research Use Only

# cGAS Recombinant antibody

Catalog Number: 84045-1-RR



## Basic Information

Catalog Number:

84045-1-RR

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG31677

GenBank Accession Number:

BC145651

GeneID (NCBI):

214763

UNIPROT ID:

Q8C6L5

Full Name:

RIKEN cDNA E330016A19 gene

Calculated MW:

58 kDa

Observed MW:

58 kDa

Purification Method:

Protein A purification

CloneNo.:

240964E2

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF/ICC 1:125-1:500

## Applications

Tested Applications:

WB, IF/ICC, IP, ELISA

Species Specificity:

mouse

Positive Controls:

WB : NIH/3T3 cells, RAW 264.7 cells, C2C12 cells

IP : NIH/3T3 cells,

IF/ICC : RAW 264.7 cells,

## 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. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

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

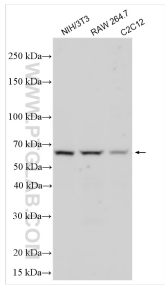
T: 4006900926

E: Proteintech-CN@ptglab.com

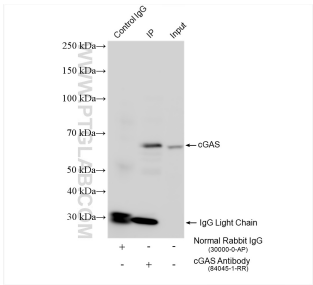
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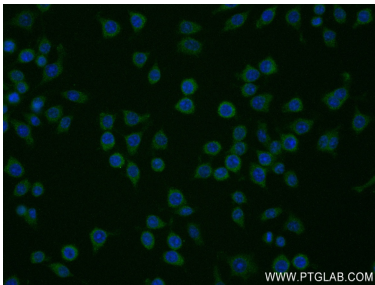
Selected Validation Data



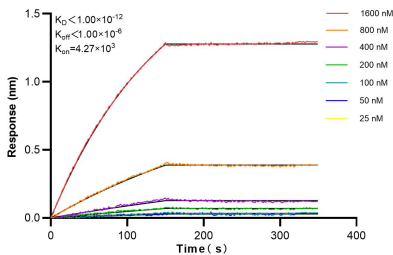
Various lysates were subjected to SDS PAGE followed by western blot with 84045-1-RR (cGAS antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-cGAS (IP: 84045-1-RR, 4 µg; Detection: 84045-1-RR 1:600) with NIH/3T3 cells lysate 1920 µg.



Immunofluorescent analysis of (-20°C Ethanol) fixed RAW 264.7 cells using cGAS antibody (84045-1-RR, Clone: 240964E2) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 84045-1-RR against Mouse cGAS were performed. The affinity constant is below 1 pM.