

For Research Use Only

# Mouse cGAS Recombinant antibody, PBS Only

Catalog Number: 84045-1-PBS



## Basic Information

<b>Catalog Number:</b> 84045-1-PBS	<b>GenBank Accession Number:</b> BC145651	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 214763	<b>CloneNo.:</b> 240964E2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q8C6L5	
<b>Isotype:</b> IgG	<b>Full Name:</b> RIKEN cDNA E330016A19 gene	
<b>Immunogen Catalog Number:</b> AG31677	<b>Calculated MW:</b> 58 kDa	
	<b>Observed MW:</b> 58 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, ELISA

**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

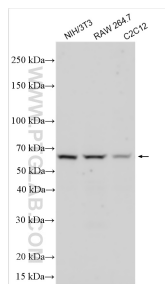
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only

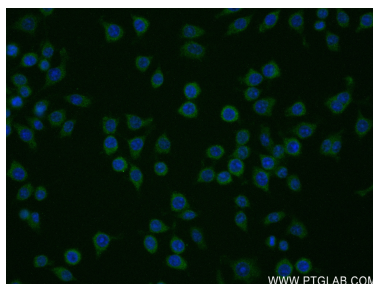
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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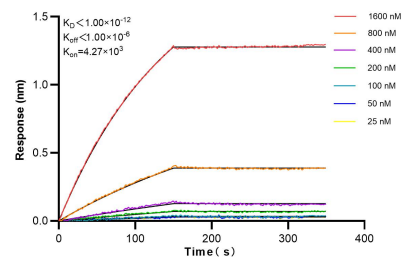
## Selected Validation Data



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. This data was developed using the same antibody clone with 84045-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 84045-1-PBS in a different storage buffer formulation.



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