

For Research Use Only

# cGAS Monoclonal antibody

Catalog Number: 68640-1-Ig **1 Publications**



## Basic Information

<b>Catalog Number:</b> 68640-1-Ig	<b>GenBank Accession Number:</b> BC113608	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 115004	<b>CloneNo.:</b> 2G2C5
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q8N884	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> chromosome 6 open reading frame 150	
<b>Immunogen Catalog Number:</b> AG30074	<b>Calculated MW:</b> 496 aa, 54 kDa	
	<b>Observed MW:</b> 60 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB	<b>WB :</b> Karpas-299 cells, MDA-MB-231 cells, NCI-H1299 cells, SCaBER cells, A431 cells
<b>Species Specificity:</b> human	<b>IF/ICC :</b> HeLa cells,
<b>Cited Species:</b> mouse	

## Background Information

cGAS (Cyclic GMP-AMP synthase), also known as C6orf150 or h-cGAS, is a 522 aa protein. cGAS mediates innate immune responses against invading pathogens, or against self-dsDNA, which causes autoimmune disorders. The cGAS sensor not only recognizes cytosolic dsDNA but also synthesizes the second messenger cGAMP from ATP and GTP, which then binds to and activates STING. STING undergoes conformational changes and translocation from the endoplasmic reticulum to the Golgi apparatus to encounter TBK1 and IRF3, eventually triggering the production of type I IFNs.

## Notable Publications

Author	Pubmed ID	Journal	Application
Moxuan Zhao	39260550	Environ Pollut	WB

## Storage

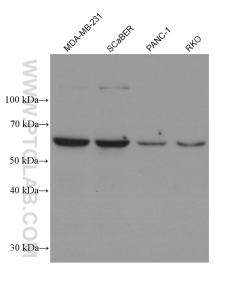
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

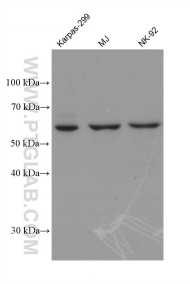
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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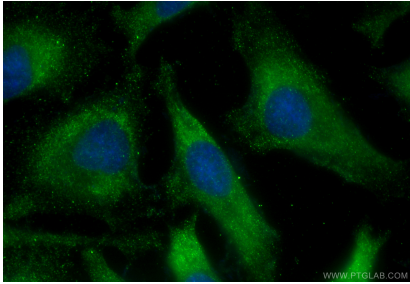
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68640-1-Ig (cGAS antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using cGAS antibody (68640-1-Ig, Clone: 2G2C5 ) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).