

For Research Use Only

# cGAS Polyclonal antibody

Catalog Number: 26416-1-AP

Featured Product

100 Publications



## Basic Information

### Catalog Number:

26416-1-AP

### Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG23455

### GenBank Accession Number:

BC113608

### GeneID (NCBI):

115004

### UNIPROT ID:

Q8N884

### Full Name:

chromosome 6 open reading frame 150

### Calculated MW:

496 aa, 54 kDa

### Observed MW:

58 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IHC 1:400-1:1600

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human

### Cited Species:

human, rat, pig, bovine, hamster

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB: HL-60 cells, HAP1 cells, THP-1 cells

IHC: human colon cancer tissue, human colon tissue

IF/ICC: HeLa cells,

## 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
Chengzhi Han	36070120	Mol Neurobiol	IF
Shuai Liu	36058409	Int J Pharm	WB,IF,IHC
Jie Wang	29089548	Sci Rep	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

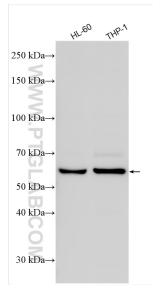
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

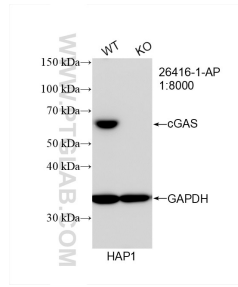
E: proteintech@ptglab.com  
W: ptglab.com

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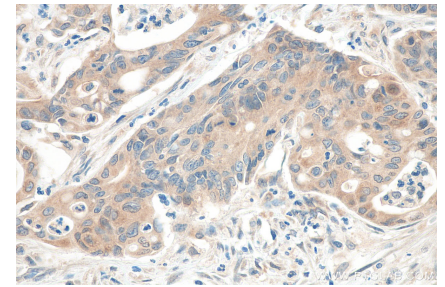
## Selected Validation Data



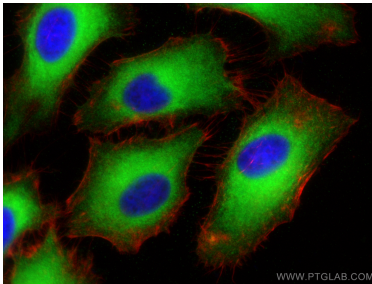
Various lysates were subjected to SDS PAGE followed by western blot with 26416-1-AP (cGAS antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



WB result of cGAS antibody (26416-1-AP; 1:8000; room temperature for 1.5 hours) with wild-type and cGAS knockout HAP1 cells.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 26416-1-AP (cGAS antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using cGAS antibody (26416-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).