### For Research Use Only

# cGAS Polyclonal antibody

Catalog Number: 26416-1-AP

Featured Product

102 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 26416-1-AP BC113608 GeneID (NCBI): Concentration: 1000 ug/ml 115004 **UNIPROT ID:** Source: Rabbit Q8N884

Full Name: Isotype: chromosome 6 open reading frame

Immunogen Catalog Number:

AG23455 Calculated MW:

496 aa. 54 kDa Observed MW: 58 kDa

**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

**Purification Method:** 

Antigen affinity purification Recommended Dilutions:

WB: 1:2000-1:16000 IHC: 1:400-1:1600 IF/ICC: 1:200-1:800

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.

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

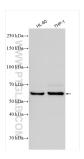
Aliquoting is unnecessary for -20°C storage

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

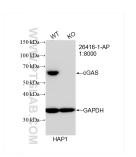
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

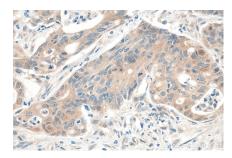
## **Selected Validation Data**



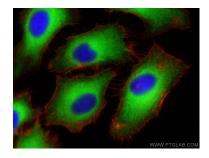
Various lysates were subjected to SDS PAGE followed by western blot with 26416-1-AP (cGAS antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



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 paraffinembedded 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  $\lg G(H+L)$  (SA00013-2), CL594-Phalloidin (red).