

For Research Use Only

cGAS Recombinant antibody

Catalog Number: 82869-1-RR

Featured Product



Basic Information

Catalog Number:

82869-1-RR

Concentration:

1000 ug/ml

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:

62 kDa

Purification Method:

Protein A purification

CloneNo.:

1H1

Recommended Dilutions:

WB: 1:1000-1:4000

IF/ICC: 1:50-1:500

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IF/ICC, ELISA

Species Specificity:

human

Positive Controls:

WB : HeLa cells, HAP1 cells, HL-60 cells, THP-1 cells, MCF-7 cells, NK-92 cells

IF/ICC : A431 cells,

FC (Intra) : A431 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.

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:

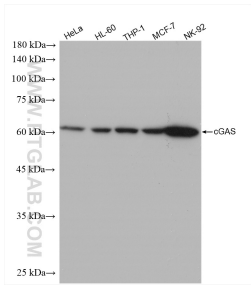
T: 4006900926

E: Proteintech-CN@ptglab.com

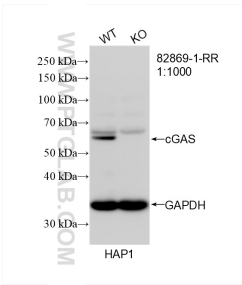
W: ptgcn.com

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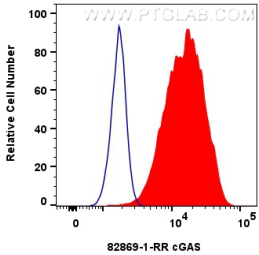
Selected Validation Data



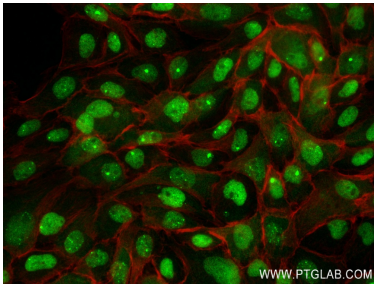
Various lysates were subjected to SDS PAGE followed by western blot with 82869-1-RR (cGAS antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



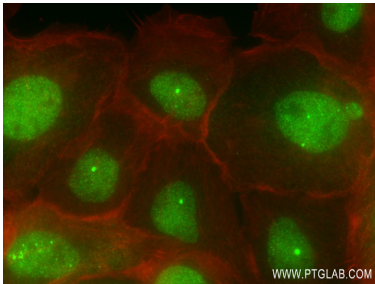
WB result of cGAS antibody (82869-1-RR; 1:1000; room temperature for 1.5 hours) with wild-type and cGAS knockout HAP1 cells.



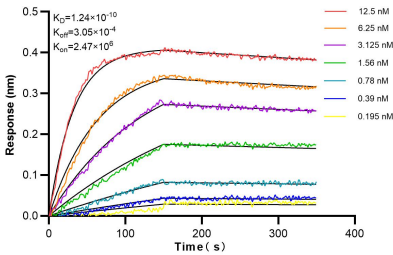
1x10⁶ A431 cells were intracellularly stained with 0.25 ug cGAS Recombinant antibody (82869-1-RR, Clone:1H1) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using cGAS antibody (82869-1-RR, Clone: 1H1) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using cGAS antibody (82869-1-RR, Clone: 1H1) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Bi-layer interferometry (BLI) kinetic assays of 82869-1-RR against Human cGAS were performed. The affinity constant is 0.124 nM.