

For Research Use Only

cGAS Recombinant antibody, PBS Only

Catalog Number: 82869-1-PBS

Featured Product



Basic Information

Catalog Number:

82869-1-PBS

Size:

100ug, Concentration: 1mg/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:

62 kDa

Purification Method:

Protein A purification

CloneNo.:

1H1

Applications

Tested Applications:

WB, IF/ICC, Indirect ELISA

Species Specificity:

human

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 -80°C.

Storage Buffer:

PBS Only

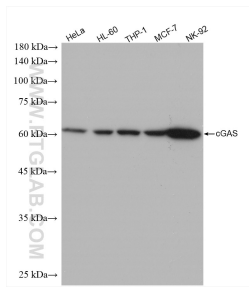
For technical support and original validation data for this product please contact:

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

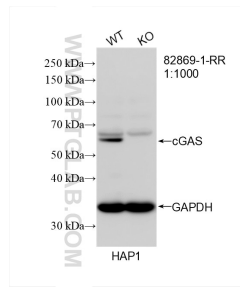
E: proteintech@ptglab.com
W: ptglab.com

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

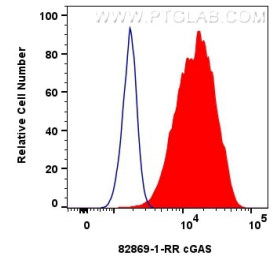
Selected Validation Data



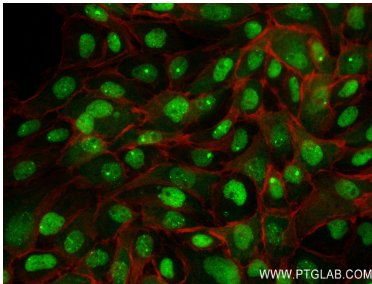
Various lysates were subjected to SDS PAGE followed by western blot with 82869-1-RR (cGAS antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82869-1-PBS in a different storage buffer formulation.



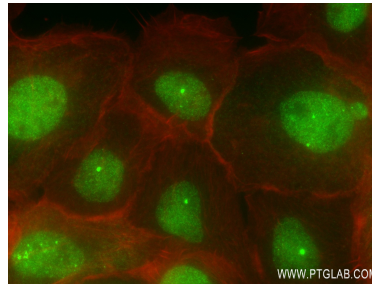
WB result of cGAS antibody (82869-1-RR; 1:1000; room temperature for 1.5 hours) with wild-type and cGAS knockout HAP1 cells. This data was developed using the same antibody clone with 82869-1-PBS in a different storage buffer formulation.



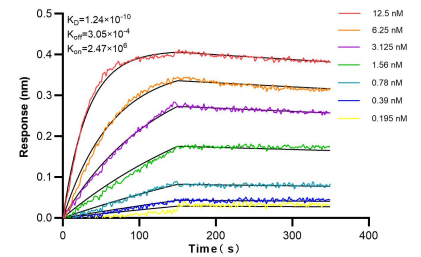
1×10^6 A431 cells were intracellularly stained with 0.25 ug cGAS Recombinant antibody (82869-1-RR, Clone:1H1) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2) (red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 82869-1-PBS



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). This data was developed using the same antibody clone with 82869-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 82869-1-PBS in a different storage buffer formulation.



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