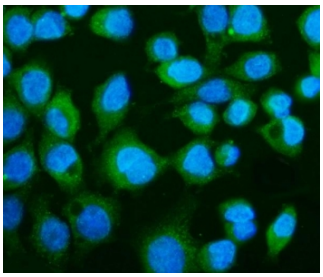
cGAS Antibody / cGAMP Synthase (RQ6412)

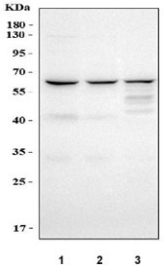
Catalog No.	Formulation	Size
RQ6412	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

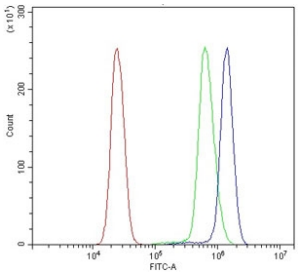
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q8N884
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence (FFPE) : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This cGAS antibody is available for research use only.



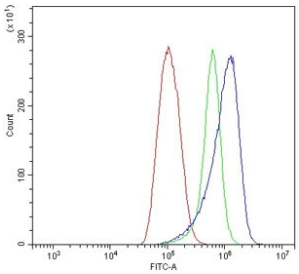
Immunofluorescent staining of FFPE human Caco-2 cells with cGAS antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) Caco-2 and 3) A431 cell lysate with cGAS antibody. Predicted molecular weight ~59 kDa.



Flow cytometry testing of human U937 cells with cGAS antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= cGAS antibody.



Flow cytometry testing of human ThP-1 cells with cGAS antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= cGAS antibody.

Description

cGAS (cyclic GMP-AMP synthase), also known as MB21D1 (Mab-21 domain containing 1), h-cGAS or C6orf150, is a 522 amino acid cytoplasmic nucleotidyltransferase that catalyzes the formation of cyclic GMP-AMP (cGAMP) from ATP and GTP. cGAS is suggested to have antiviral activity by acting as a key cytosolic DNA sensor. cGAS binds to cytosolic DNA, which leads to cGAMP synthesis and activation of TMEM173, thereby trigger type-I interferon production. Expressed in monocytic cell line THP1, cGAS exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 6q13.

Application Notes

Optimal dilution of the cGAS antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids L208-F522) was used as the immunogen for the cGAS antibody.

Storage

After reconstitution, the cGAS antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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