

## ARG54961 anti-cGAS antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes cGAS
Tested Reactivity	Hu
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	cGAS
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 266-295 (Center) of Human cGAS.
Conjugation	Un-conjugated
Alternate Names	cGAMP synthase; Cyclic GMP-AMP synthase; Mab-21 domain-containing protein 1; C6orf150; EC 2.7.7.86; cGAS; h-cGAS

### Application Instructions

Application table	Application	Dilution
	FACS	1:10 - 1:50
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	MCF7	

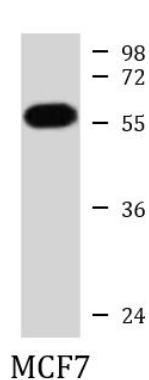
### Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Database links	<a href="#">GeneID: 115004 Human</a> <a href="#">Swiss-port # Q8N884 Human</a>
Gene Symbol	MB21D1
Gene Full Name	Mab-21 domain containing 1
Function	Nucleotidyltransferase that catalyzes the formation of cyclic GMP-AMP (cGAMP) from ATP and GTP. Catalysis involves both the formation of a 2',5' phosphodiester linkage at the GpA step and the formation of a 3',5' phosphodiester linkage at the ApG step, producing c[G(2',5')pA(3',5')p]. Has antiviral activity by acting as a key cytosolic DNA sensor, the presence of double-stranded DNA (dsDNA) in the cytoplasm being a danger signal that triggers the immune responses. Binds cytosolic DNA directly, leading to activation and synthesis of cGAMP, a second messenger that binds to and activates TMEM173/STING, thereby triggering type-I interferon production. [UniProt]
Highlight	Related products: <a href="#">cGAS antibodies; Anti-Rabbit IgG secondary antibodies;</a> Related news: <a href="#">Exploring Antiviral Immune Response</a>
Research Area	Cell Biology and Cellular Response antibody
Calculated Mw	59 kDa
PTM	Polyglutamylated by TTL6 at Glu-286, leading to impair DNA-binding activity. Monoglutamylated at Glu-314 by TTL4, leading to impair the nucleotidyltransferase activity. Deglutamylated by AGBL5/CCP5 and AGBL6/CCP6. Cleaved by CASP1 at Asp-140 and Asp-157 upon DNA virus infection; the cleavage impairs cGAMP production (PubMed:28314590). Also cleaved by the pyroptotic CASP4 and CASP5 during non-canonical inflammasome activation; they don't cut at the same sites than CASP1 (PubMed:28314590).
Cellular Localization	Cytoplasm, cytosol

## Images



ARG54961 anti-cGAS antibody WB image

Western blot: 20 µg of MCF7 cell lysate stained with ARG54961 anti-cGAS antibody at 1:1000 dilution.