

cGAS Rabbit pAb

货号: **AYP23502**

产品信息

反应	Human
宿主	Rabbit
克隆性	Polyclonal
预测反应	
应用	WB
推荐浓度	WB: 1:500 - 1:2000
理论分子量	49kDa/58kDa
实测分子量	49kDa/58kDa
形式	Liquid
保存条件	Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
偶联物	Unconjugated
阳性对照	
细胞定位	Cytoplasm,cytosol
纯化	Affinity purification

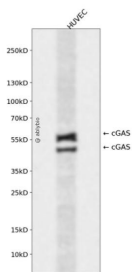
抗原信息

抗原信息	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human cGAS (NP_612450.2).
序列	MQPWHGKAMQRASEAGATAPKASARNARGAPMDPTESPAAPEAALPKAGKFGPARKSGSRQKKSAPDTQERPPVRAT GARAKKAPQRAQDTQPSDATSAP

靶点信息

研究背景	Nucleotidyltransferase that catalyzes the formation of cyclic GMP-AMP (cGAMP) from ATP and GTP and plays a key role in innate immunity (PubMed:23258413, PubMed:23707061, PubMed:23722159, PubMed:24077100, PubMed:25131990, PubMed:29976794, PubMed:30799039). 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] (PubMed:28363908, PubMed:28214358). Acts 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 (PubMed:28363908). 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 (PubMed:28363908, PubMed:28314590). Preferentially recognizes and binds curved long DNAs (PubMed:30007416). In contrast to other mammals, human CGAS displays species-specific mechanisms of DNA recognition and produces less cyclic GMP-AMP (cGAMP), allowing a more fine-tuned response to pathogens (PubMed:30007416). Has antiviral activity by sensing the presence of dsDNA from DNA viruses in the cytoplasm (PubMed:28363908). Also acts as an innate immune sensor of infection by retroviruses, such as HIV-1, by detecting the presence of reverse-transcribed DNA in the cytosol (PubMed:23929945). Detection of retroviral reverse-transcribed DNA in the cytosol may be indirect and be mediated via interaction with PQBP1, which directly binds reverse-transcribed retroviral DNA (PubMed:26046437). Also detects the presence of DNA from bacteria, such as M.tuberculosis (PubMed:26048138). cGAMP can be transferred from producing cells to neighboring cells through gap junctions, leading to promote TMEM173/STING activation and convey immune response to connecting cells (PubMed:24077100).
基因ID	115004
基因名	MB21D1
Swiss	Q8N884
别名	MB21D1; C6orf150; cGAS; h-cGAS; cyclic GMP-AMP synthase

产品验证



Western blot analysis of cGAS expressed in HUVEC using cGAS Rabbit pAb at 1:1000. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:5000. Lysates/proteins: 30ug per lane. Blocking buffer: 5% non-fat dry milk in TBST. Detection: ECL Enhanced Kit. Exposure time: 120s.

实验步骤

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