Proteins

Product Data Sheet

2',3'-cGAMP

Cat. No.: HY-100564 CAS No.: 1441190-66-4 Molecular Formula: $C_{20}H_{24}N_{10}O_{13}P_{2}$

Molecular Weight: 674.41

Endogenous Metabolite; STING; IFNAR Target:

Pathway: Metabolic Enzyme/Protease; Immunology/Inflammation

Storage: -20°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro

 $H_2O : \ge 50 \text{ mg/mL } (74.14 \text{ mM})$

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.4828 mL	7.4139 mL	14.8278 mL
	5 mM	0.2966 mL	1.4828 mL	2.9656 mL
	10 mM	0.1483 mL	0.7414 mL	1.4828 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	$2',3'$ -cGAMP ($2'$ - $3'$ -cyclic GMP-AMP) is a endogenous cGAMP in mammalian cells. $2',3'$ -cGAMP binds to STING with a high affinity and is a potent inducer of interferon- β (IFN β). $2',3'$ -cGAMP is produced in mammalian cells in response to DNA in the cytoplasm ^[1] .
IC ₅₀ & Target	STING, IFN $eta^{[1]}$
In Vitro	2',3'-cGAMP (2'-3'-cyclic GMP-AMP) contains two distinct phosphodiester linkages, one between 2'-OH of GMP and 5'-phosphate of AMP, and the other between 3'-OH of AMP and 5'-phosphate of GMP ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

• Protein Cell. 2021 Oct 22;1-21.

- Neuron. 2022 Nov 4;S0896-6273(22)00961-8.
- Cell Rep. 2023 Feb 28;42(3):112145.
- Cell Commun Signal. 2023 Sep 28;21(1):264.
- Fundamental Research. 2023 May 11.

See more customer validations on $\underline{www.MedChemExpress.com}$

REFERENCES

[1]. Zhang X, et al. Cyclic GMP-AMP containing mixed phosphodiester linkages is an endogenous high-affinity ligand for STING. Mol Cell. 2013 Jul 25;51(2):226-35.

Caution: Product has not been fully validated for medical applications. For research use only.

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Page 2 of 2 www.MedChemExpress.com