

PRODUCT INFORMATION



3'3'-cGAMP (sodium salt)

Item No. 17966

CAS Registry No.: 2407516-83-8
Formal Name: adenylyl-(3'→5')-3'-guanylic acid, cyclic nucleotide, disodium salt

Synonyms: Adenosine-Guanosine 3',3'-cyclic monophosphate, c-GpAp, 3',3'-Cyclic GMP-AMP

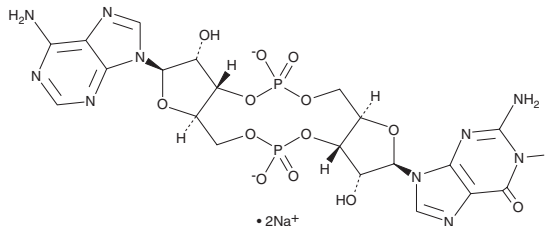
MF: C₂₀H₂₂N₁₀O₁₃P₂ • 2Na
FW: 718.4

Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

3'3'-cGAMP (sodium salt) is supplied as a crystalline solid. 3'3'-cGAMP (sodium salt) is soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

3'3'-cGAMP is a second messenger produced in bacteria by specific dinucleotide cyclases.¹ It contains canonical 3'5'-phosphodiester bonds and regulates chemotaxis, colonization, and other cellular functions. 3'3'-cGAMP shows weaker binding to the adapter protein stimulator of interferon genes (STING; K_d = 1.04 μM) than 2'2'-cGAMP (Item No. 22419; K_d = 287 nM) and 2'3'-cGAMP (Item No. 19887; K_d = 3.79 nM) but has similar binding affinity to 3'2'-cGAMP (K_d = 1.61 μM) and cyclic di-GMP (Item No. 17144; K_d = 1.21 μM).² 3'3'-cGAMP induces IFN-β mRNA expression in L929 cells (EC₅₀ = 40.5 nM).

References

1. Davies, B.W., Bogard, R.W., Young, T.S., *et al.* Coordinated regulation of accessory genetic elements produces cyclic di-nucleotides for *V. cholerae* virulence. *Cell* **149**(2), 358-370 (2012).
2. Zhang, X., Shi, H., Wu, J., *et al.* Cyclic GMP-AMP containing mixed phosphodiester linkages is an endogenous high-affinity ligand for STING. *Mol. Cell* **51**(2), 226-235 (2015).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/07/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM