

PRODUCT INFORMATION

2'-Deoxy-3'-O-(N'-methylantraniloyl)guanosine-5'-O-diphosphate (sodium salt)

Item No. 38458

Formal Name: 2'-deoxy-3'-[2-(methylamino)benzoate] guanosine 5'-(trihydrogen diphosphate), trisodium salt

Synonyms: 2'-deoxy-3'-MANT-GDP, MANT-dGDP

MF: C₁₈H₁₉N₆O₁₁P₂ • 3Na

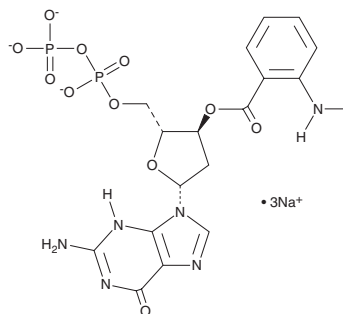
FW: 626.3

Purity: ≥95%

Supplied as: A solution in water

Storage: -80°C

Stability: ≥4 years



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

Description

2'-Deoxy-3'-O-(N'-methylantraniloyl)guanosine-5'-O-diphosphate (2'-deoxy-3'-MANT-GDP) is a fluorescent derivative of dGDP.^{1,2} Formation of 2'-deoxy-3'-MANT-GDP from 2'-deoxy-3'-MANT-GTP (Item No. 38459) has been used to quantify the activity of various GTPases, including H-Ras p21 and dynamin 2.^{2,3} A related derivative, 2'(3')-MANT-GTP (Item No. 38469), displays an emission maximum of 442 nm upon excitation at 350 nm.⁴

References

1. Gille, A., Lushington, G.H., Mou, T.-C., *et al.* Differential inhibition of adenylyl cyclase isoforms and soluble guanylyl cyclase by purine and pyrimidine nucleotides. *J. Biol. Chem.* **279**(19), 19955-19969 (2004).
2. John, J., Sohmen, R., Feuerstein, J., *et al.* Kinetics of interaction of nucleotides with nucleotide-free H-ras p21. *Biochemistry* **29**(25), 6058-6065 (1990).
3. Binns, D.D., Helms, M.K., Barylko, B., *et al.* The mechanism of GTP hydrolysis by dynamin II: A transient kinetic study. *Biochemistry* **39**(24), 7188-7196 (2000).
4. Hiratsuka, T. New ribose-modified fluorescent analogs of adenine and guanine nucleotides available as substrates for various enzymes. *Biochim. Biophys. Acta* **742**(3), 496-508 (1983).

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.

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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