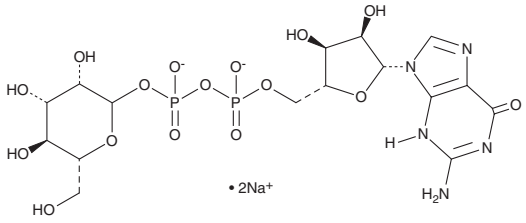
PRODUCT INFORMATION

Guanosine 5′-diphospho-D-mannose (sodium salt)

Item No. 46575

CAS Registry No.: 103301-73-1
Formal Name: guanosine 5′-(trihydrogen diphosphate), P′-D-mannopyranosyl ester, disodium salt
Synonyms: GDP-mannose, GDP-D-mannose
MF: $C_{16}H_{23}N_5O_{16}P_2 \bullet 2Na$
FW: 649.3
Purity: ≥95%
Supplied as: A 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

Guanosine 5′-diphospho-D-mannose (sodium salt) is supplied as a solid. Aqueous solutions of guanosine 5′-diphospho-D-mannose (sodium salt) can be prepared by directly dissolving the solid in aqueous buffers. Guanosine 5′-diphospho-D-mannose (sodium salt) is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Guanosine 5'-diphospho-D-mannose is a nucleoside sugar and substrate for GDP-D-mannose-4,6-dehydratase (GMD), the first enzyme in GDP-β-L-fucose (Item No. 46188) biosynthesis.[1,2]

References

1. Bisso, A., Sturla, L., Zanardi, D., *et al.* Structural and enzymatic characterization of human recombinant GDP-D-mannose-4,6-dehydratase. *FEBS Lett.* **456(3)**, 370-374 (1999).
2. Somoza, J.R., Menon, S., Schmidt, H., *et al.* Structural and kinetic analysis of Escherichia coli GDP-mannose 4,6 dehydratase provides insights into the enzyme's catalytic mechanism and regulation by GDP-fucose. *Structure* **8(2)**, 123-135 (2000).

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, 09/28/2026

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