

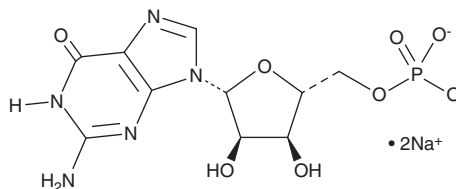
PRODUCT INFORMATION



Guanosine 5'-monophosphate (sodium salt)

Item No. 16957

CAS Registry No.: 5550-12-9
Formal Name: 5'-guanylic acid, disodium salt
Synonyms: GMP, 5'-Guanylic Acid, NSC 20265
MF: C₁₀H₁₂N₅O₈P • 2Na
FW: 407.2
Purity: ≥98%
UV/Vis.: λ_{max}: 255 nm
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

Guanosine 5'-monophosphate (GMP) (sodium salt) is supplied as a crystalline solid. Aqueous solutions of GMP (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of GMP (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

GMP is a nucleotide used in the synthesis of RNA. Upon phosphorylation to GTP, it becomes incorporated into RNA by various RNA polymerases.¹ It can be used to study modulation of glutamatergic neurotransmission.²

References

1. Ohta, T., Sarkar, S., and Thach, R.E. The role of guanosine 5'-triphosphate in the initiation of peptide synthesis. III. Binding of formylmethionyl-tRNA to ribosomes. *Proc. Nat. Acad. Sci. USA* **58(4)**, 1638-1644 (1967).
2. Ganzella, M., Moreira, J.D., Almeida, R.F., *et al.* Effects of 3 weeks GMP oral administration on glutamatergic parameters in mice neocortex. *Purinergic Signal.* **8(1)**, 49-58 (2012).

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

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