

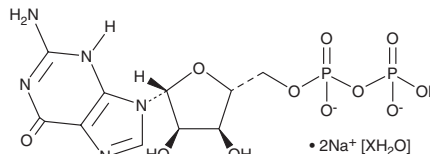
PRODUCT INFORMATION



Guanosine 5'-diphosphate (sodium salt hydrate)

Item No. 31704

Formal Name:	guanosine, 5'-(trihydrogen diphosphate), disodium salt, hydrate
Synonym:	GDP
MF:	$C_{10}H_{13}N_5O_{11}P_2 \cdot 2Na [XH_2O]$
FW:	487.2
Purity:	≥90%
UV/Vis.:	λ_{max} : 254 nm
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'-diphosphate (GDP) (sodium salt hydrate) is supplied as a solid. Aqueous solutions of GDP (sodium salt hydrate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of GDP (sodium salt hydrate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

GDP is a purine nucleotide and biosynthetic precursor of guanosine 5'-triphosphate (GTP; Item No. 16060).¹ It has been used to study the conformations of GTPases.² GDP (100 μ M) activates sulfonylurea receptor 2B (SUR2B) linked to the inward-rectifier potassium channel 6.1 ($K_{ir}6.1$) in HEK293T cells in a patch-clamp assay.³

References

1. Berg, J.M., Tymoczko, J.L., and Stryer, L. *Biochemistry*. 5th ed., W.H. Freeman, New York (2002).
2. Vetter, I.R. and Wittinghofer, A. The guanine nucleotide-binding switch in three dimensions. *Science* **294**(5545), 1299-1304 (2001).
3. Yamada, M., Isomoto, S., Matsumoto, S., et al. Sulphonylurea receptor 2B and Kir6.1 form a sulphonylurea-sensitive but ATP-insensitive K^+ channel. *J. Physiol.* **499**(Pt 3), 715-720 (1997).

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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