

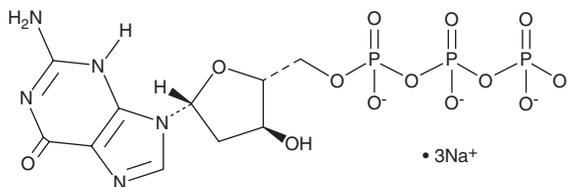
PRODUCT INFORMATION



2'-Deoxyguanosine-5'-O-triphosphate (sodium salt)

Item No. 35771

CAS Registry No.: 93919-41-6
Formal Name: 2'-deoxy-guanosine 5'-(tetrahydrogen triphosphate), trisodium salt
Synonym: dGTP
MF: C₁₀H₁₃N₅O₁₃P₃ • 3Na
FW: 573.1
Purity: ≥95%
UV/Vis.: λ_{max}: 253 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

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

Description

dGTP is a nucleoside triphosphate.¹ It has commonly been used in PCR reaction mixtures as a substrate for DNA synthesis by DNA polymerases. dGTP can be oxidized to 8-hydroxy-dGTP and 8-oxo-7,8-GTP, which can be misincorporated into DNA.²

References

1. Mohsen, M.G., Ji, D., and Kool, E.T. Polymerase synthesis of four-base DNA from two stable dimeric nucleotides. *Nucleic Acids Res.* **47(18)**, 9495-9501 (2019).
2. Kamiya, H. Mutagenicity of oxidized DNA precursors in living cells: Roles of nucleotide pool sanitization and DNA repair enzymes, and translesion synthesis DNA polymerases. *Mutat. Res.* **703(1)**, 32-36 (2010).

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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