

PRODUCT INFORMATION



6-Chloropurine riboside-5'-triphosphate (sodium salt)

Item No. 38553

Formal Name: 6-chloro-9-[5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-β-D-ribofuranosyl]-9H-purine, tetrasodium salt

Synonym: 6-chloro PuTP

MF: C₁₀H₁₀ClN₄O₁₃P₃ • 4Na

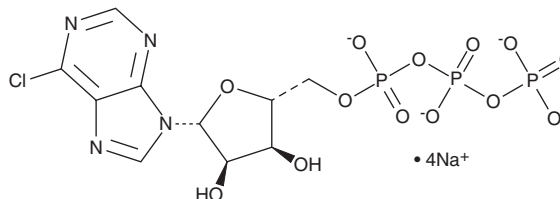
FW: 614.5

Purity: ≥95%

Supplied as: A solution in water

Storage: -80°C

Stability: ≥2 years



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

Description

6-Chloropurine riboside-5'-triphosphate is an inhibitor of the RNA triphosphatase mRNA-capping enzyme subunit β (Cet1; IC₅₀ = 2 μM for the GTPase activity of the *S. cerevisiae* enzyme) and a phosphorylated form of 6-chloropurine riboside (Item No. 36002).¹ It also activates *E. coli* aspartate carbamoyltransferase (EC₅₀ = 0.76 mM).² 6-Chloropurine riboside-5'-triphosphate has been used in the synthesis of cytokinins with anticancer activity and a photoclickable form of ATP.^{3,4}

References

1. Issur, M., Despins, S., Bougie, I., *et al.* Nucleotide analogs and molecular modeling studies reveal key interactions involved in substrate recognition by the yeast RNA triphosphatase. *Nucleic Acids Res.* **37(11)**, 3714-3722 (2009).
2. Sakash, J.B., Tsen, A., and Kantrowitz, E.R. The use of nucleotide analogs to evaluate the mechanism of the heterotropic response of *Escherichia coli* aspartate transcarbamoylase. *Protein Sci.* **9(1)**, 53-63 (2000).
3. Voller, J., Zatloukal, M., Lenobel, R., *et al.* Anticancer activity of natural cytokinins: A structure-activity relationship study. *Phytochemistry* **71(11-12)**, 1350-1359 (2010).
4. Jelcic, M., Wang, K., Hui, K.L., *et al.* A photo-clickable ATP-mimetic reveals nucleotide interactors in the membrane proteome. *Cell Chem. Biol.* **27(8)**, 1073-1083 (2020).

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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