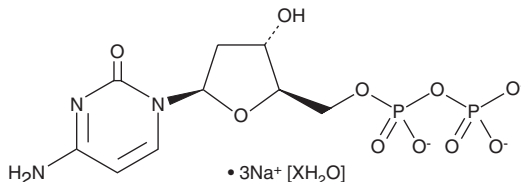


PRODUCT INFORMATION

2'-Deoxycytidine 5'-diphosphate (sodium salt hydrate)

Item No. 22982

CAS Registry No.: 151151-32-5
Formal Name: 2'-deoxy-cytidine 5'-(trihydrogen diphosphate), trisodium salt, hydrate
Synonym: dCDP
MF: $C_9H_{12}N_3O_{10}P_2 \cdot 3Na [XH_2O]$
FW: 453.1
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 271 nm
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

2'-Deoxycytidine 5'-diphosphate (dCDP) (sodium salt hydrate) is supplied as a crystalline solid. Aqueous solutions of dCDP (sodium salt hydrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of dCDP (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

dCDP is a nucleotide diphosphate used in various biochemical research applications including studies of DNA synthesis.¹⁻³ It is a substrate for various nucleoside diphosphate kinases to synthesize dCTP.⁴

References

1. Sun, Q., Gong, S., Sun, J., et al. A P(V)-N activation strategy for the synthesis of nucleoside polyphosphates. *J. Org. Chem.* **78**(17), 8417-8426 (2013).
2. Weiss, B. The deoxycytidine pathway for thymidylate synthesis in *Escherichia coli*. *J. Bacteriol.* **189**(21), 7922-7926 (2007).
3. Wallace, T.L. and Johnson, E.M., Jr. Cytosine arabinoside kills postmitotic neurons: Evidence that deoxycytidine may have a role in neuronal survival that is independent of DNA synthesis. *J. Neurosci.* **9**(1), 115-124 (1989).
4. Wishart, D.S., Jewison, T., Guo, A.C., et al. HMDB 3.0--The Human Metabolome Database in 2013. *Nucleic Acids Res.* **41**(Database issue), D801-D807 (2013).

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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