

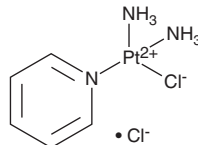
PRODUCT INFORMATION



cDPCP

Item No. 34547

CAS Registry No.: 106343-59-3
Formal Name: (SP-4-3)-diamminechloro(pyridine)-
platinum(1+), monochloride
MF: C₅H₁₁ClN₃Pt • Cl
FW: 379.2
Purity: ≥95%
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

cDPCP is supplied as a solid. A stock solution may be made by dissolving the cDPCP in the solvent of choice, which should be purged with an inert gas. cDPCP is slightly soluble in DMSO.

cDPCP is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

cDPCP is a platinum-containing DNA-crosslinking agent.¹ Unlike cisplatin (Item No. 13119) or oxaliplatin (Item No. 13106), cDPCP forms monofunctional DNA adducts. It is transported into cells by organic cation transporter 1 (OCT1) and OCT2, inhibiting proliferation of MDCK cells expressing the human transporters with IC₅₀ values of 8.1 and 1.5 μM, respectively. cDPCP inhibits RNA polymerase II-mediated transcription in a reporter assay using HeLa cells. It increases survival in murine S180 sarcoma and P388 leukemia models when administered at doses of 40 and 80 mg/kg, respectively.²

References

1. Lovejoy, K.S., Todd, R.C., Zhang, S., *et al.* *cis*-Diammine(pyridine)chloroplatinum(II), a monofunctional platinum(II) antitumor agent: Uptake, structure, function, and prospects. *Proc. Natl. Acad. Sci. USA* **105**(26), 8902-9807 (2008).
2. Hollis, L.S., Amundsen, A.R., and Stern, E.W. Chemical and biological properties of a new series of *cis*-diammineplatinum(II) antitumor agents containing three nitrogen donors: *cis*-[Pt(NH₃)₂(N-donor)Cl]⁺. *J. Med. Chem.* **32**(1), 128-136 (1989).

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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