



Catalog # 10-2204

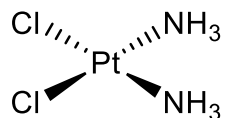
Cisplatin

CAS# 15663-27-1

Cis-Diaminodichloroplatinum

CDDP; cis-Diamineplatinum(II) dichloride

Lot # X106257



Induces intra- and interstrand DNA adducts which poison topoisomerase I.¹ Synergizes with topoisomerase I inhibitors such as topotecan.¹ Induces apoptosis by sequential activation of caspase-8, -3 and -6 in osteosarcoma cells.² Inhibits expression of X-linked inhibitor of apoptosis protein (XIAP) in human LNCaP cells.³ Numerous mechanisms inhibit propagation of cisplatin-induced DNA damage to signal apoptosis resulting in resistance.⁴ Clinically useful anticancer agent.

- 1) Van Waardenburg *et al.* (2004), *Platinated DNA adducts enhance poisoning of DNA topoisomerase I by camptothecin*; J. Biol. Chem., **279** 54502
- 2) Siddik *et al.* (2003), *Cisplatin: mode of cytotoxic action and molecular basis of resistance*; Oncogene, **22** 7265
- 3) Seki *et al.* (2000), *Cisplatin (CDDP) specifically induces apoptosis via sequential activation of caspase-8, -3 and -6 in osteosarcoma*; Cancer Chemother. Pharmacol., **45** 199
- 4) Nomura *et al.* (2004), *Cisplatin inhibits the expression of X-linked inhibitor of apoptosis protein in human LNCaP cells*; Urol. Oncol., **22** 453
- 5) Raghavan *et al.* (2015), *Dimethylsulfoxide inactivates the anticancer effect of cisplatin against myelogenous leukemia cell lines in in vitro assays.*; Indian J. Pharmacol., **47** 322

PHYSICAL DATA

Molecular Weight:	300.05
Molecular Formula:	Cl ₂ H ₆ N ₂ Pt
Purity:	98% by HPLC
	Elemental Analysis: (Conforms)
Solubility:	Soluble in Water (up to 2.5 mg/ml with warming)
	Note: Compound will dissolve in DMSO, but DMSO inactivates cytotoxicity. ⁵
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied, desiccated at room temperature for up to 1 year from the date of purchase.
	Solutions in distilled water are not stable and must be used within one working day. Do not store solutions.

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