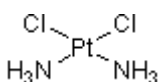


Product Name: Cisplatin
CAS Number: 15663-27-1
IUPAC Name: *cis*-Diaminodichloroplatinum

Catalog No.: 2251 **Batch No.:** 3
EC Number: 239-733-8

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $\text{Cl}_2\text{H}_6\text{N}_2\text{Pt}\cdot\frac{1}{4}\text{H}_2\text{O}$
Batch Molecular Weight: 304.55
Physical Appearance: Yellow solid
Solubility: water to 5 mM with gentle warming
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

Microanalysis:

	Carbon	Hydrogen	Nitrogen	Platinum
Theoretical	2.15	9.2	64.06	
Found	2.15	9.25	63.72	

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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CAS Number: 15663-27-1
IUPAC Name: *cis*-Diaminodichloroplatinum

Catalog No.: 2251 **Batch No.:** 3
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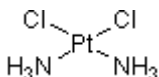
Description:

Potent anticancer agent that blocks DNA synthesis. Induces apoptosis via p53-dependent and -independent mechanisms. Inhibits X-linked inhibitor of apoptosis protein (XIAP) expression and activates caspase-3. In certain glioma cell lines, sensitizes cells to TNF- α -induced apoptosis.

Physical and Chemical Properties:

Batch Molecular Formula: Cl₂H₆N₂Pt. ¼H₂O
 Batch Molecular Weight: 304.55
 Physical Appearance: Yellow solid

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

water to 5 mM with gentle warming
 Even though it is soluble in DMSO, the use of DMSO to dissolve cisplatin in biological studies is not recommended. The DMSO was found to insert itself into the ligand.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

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. PMID: 10663637.

Duan et al (2004) Impairment of both apoptotic and cytoprotective signalings in glioma cells resistant to the combined use of cisplatin and tumor necrosis factor α . *Clin. Cancer Res.* **10** 234. PMID: 14734475.

Nomura et al (2004) Cisplatin inhibits the expression of X-linked inhibitor of apoptosis protein in human LNCaP cells. *Urol. Oncology* **22** 453.

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