Product Specification Sheet

**Product Name:** Cisplatin

**Catalog Number:** C2488

**Technical information:**

- **Chemical Formula:** H6Cl2N2Pt
- **CAS #:** 15663-27-1
- **Molecular Weight:** 301.1
- **Purity:** > 98%
- **Appearance:** Yellow solid
- **Solubility:** Soluble in DMSO up to N/A
- **Chemical Name:** cis-Diammineplatinum(II) dichloride, cis-Dichlorodiammine platinum(II), cis-Platinum(II) diammine dichloride, Cisplatin
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
- **Shelf Life:** In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

**Handling:**

- To make 10 mM stock solution, add 0.332mL of DMSO for each mg of Cisplatin
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:**

Cisplatin is an intravenously-administered platinum complex that induces cytotoxicity by interference with transcription and/or DNA replication mechanisms. Cisplatin binds preferentially to guanine, and damages tumors via induction of apoptosis. [1] DNA binding proteins recognize the topological distortion of DNA and initiate DNA damage repair, and if repair is not possible, apoptosis.

DNA adducts induced by cisplatin result in activation of several signal transduction pathways, such as ATR, p53, p73, and MAPK, leading to apoptosis. [2]

NSCLC and colon cancers are resistant to cisplatin, while others such as ovarian cancer acquire resistance over time. [3]

**Reference:**


**To reorder:** [http://www.cellagentech.com/Cisplatin/](http://www.cellagentech.com/Cisplatin/)

**For Technical Support:** [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*