

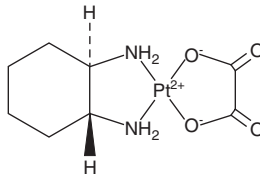
# PRODUCT INFORMATION



## Oxaliplatin

Item No. 13106

**CAS Registry No.:** 61825-94-3  
**Formal Name:** (SP-4-2)-[1R,2R-cyclohexanediamine- $\kappa N^1, \kappa N^2$ ][ethanedioato(2-)- $\kappa O^1, \kappa O^2$ ]-platinum  
**Synonyms:** Lipoxal, NSC 266046, RP 54780  
**MF:**  $C_8H_{14}N_2O_4Pt$   
**FW:** 397.3  
**Purity:**  $\geq 98\%$   
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Oxaliplatin is supplied as a crystalline solid. Aqueous solutions of oxaliplatin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of oxaliplatin in PBS (pH 7.2) is approximately 0.01 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Oxaliplatin is a platinum-containing DNA-crosslinking agent.<sup>1</sup> It induces the formation of DNA inter- and intrastrand crosslinks and DNA-protein crosslinks, inhibits DNA and RNA synthesis, and induces apoptosis in cancer cells. Oxaliplatin is cytotoxic to cisplatin-sensitive A2780(1A9) and KB-3-1 cells and cisplatin-resistant A2780-E(80) and KB-CP20 cells ( $IC_{50}$ s = 0.12, 0.39, 4.7, and 2.7  $\mu M$ , respectively).<sup>2</sup> It reduces tumor growth in an HCCLM3 mouse xenograft model when administered at doses of 5 or 10 mg/kg once per week.<sup>3</sup> Formulations containing oxaliplatin have been used in the treatment of advanced colorectal cancer and as an adjuvant in stage III colon cancer.

### References

1. Alcindor, T. and Beauger, N. Oxaliplatin: A review in the era of molecularly targeted therapy. *Curr. Oncol.* **18(1)**, 18-25 (2011).
2. Rixe, O., Ortuzar, W., Alvarez, M., et al. Oxaliplatin, tetraplatin, cisplatin, and carboplatin: Spectrum of activity in drug-resistant cell lines and in the cell lines of the National Cancer Institute's Anticancer Drug Screen panel. *Biochem. Pharmacol.* **52(12)**, 1855-1865 (1996).
3. Wang, Z., Zhou, J., Fan, J., et al. Oxaliplatin induces apoptosis in hepatocellular carcinoma cells and inhibits tumor growth. *Expert Opin. Investig. Drugs* **18(11)**, 1595-1604 (2009).

#### 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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