

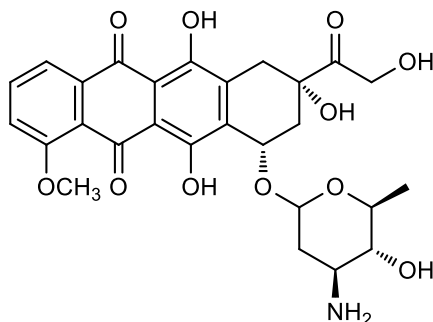
**Catalog # 10-2761**

**Epirubicin HCl**

56390-09-1

4'-Epidoxorubicin

Lot # X102904



Antitumor agent<sup>1</sup>. Inhibits topoisomerase II<sup>2</sup>. Induces DNA damage by a number of different mechanisms including intercalation, free radical-mediated oxidation, crosslinking, interference with DNA unwinding, strand separation and helicase activity<sup>3</sup>. Induces myocardial dysfunction as a side effect to chemotherapy<sup>4</sup>.

- 1) Cersosimo *et al.* (1986), *Epirubicin: a review of the pharmacology, clinical activity, and adverse effects of an adriamycin analogue*; J. Clin. Oncol., **4** 425
- 2) Spadari *et al.* (1986), *DNA polymerases and DNA topoisomerases as targets for the development of anticancer drugs*; Anticancer Res., **6** 935
- 3) Minotti *et al.* (2004), *Anthracyclines: molecular advances and pharmacologic developments in antitumor activity and cardiotoxicity*; Pharmacol. Rev., **56** 185
- 4) Mercurio *et al.* (2007), *Early epirubicin-induced myocardial dysfunction revealed by serial tissue Doppler echocardiography: correlation with inflammatory and oxidative stress markers*; Oncologist, **12** 1124

**PHYSICAL DATA**

Molecular Weight:	579.99
Molecular Formula:	C <sub>27</sub> H <sub>29</sub> NO <sub>11</sub> · HCl
Purity:	97% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml) or water (up to 5 mg/ml)
Physical Description:	Red orange solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 3 months.

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