

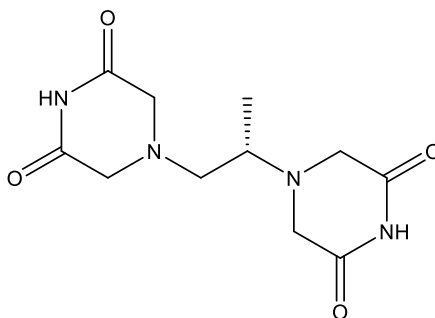
**Catalog # 10-2606**

**Dexrazoxane**

CAS# 24584-09-6

4,4'-[(1S)-1-Methyl-1,2-ethanediy]bis-2,6-piperazinedione; ICRF-187; NSC169780

Lot # X106390



Dexrazoxane is an iron chelator that has been used as a cardioprotective agent employed during chemotherapy with anthraquinone drugs such as daunorubicin or doxorubicin.<sup>1</sup> More recently it has been shown to inhibit ferroptosis. It inhibited ferroptosis in a cyclophosphamide-induced cystitis model<sup>2</sup> as well as in doxorubicin-induced cardiomyopathy<sup>3,4</sup>.

- 1) Jones *et al.* (2008), *Utility of dexrazoxane for the reduction of anthracycline-induced cardiotoxicity*; Expert Rev. Cardiovasc. Ther., **6** 1311
- 2) Mao *et al.* (2023), *Ferroptosis contributes to cyclophosphamide-induced hemorrhagic cystitis*; Chem. Biol. Interact., **384** 110701
- 3) Zhang *et al.* (2021), *Protective Effects of Dexrazoxane on Rat Ferroptosis in Doxorubicin-Induced Cardiomyopathy Through Regulating HMGB1*; Front. Cardiovasc. Med., **8** 685434
- 4) Huang *et al.* (2024), *Pharmacological activation of GPX4 ameliorates doxorubicin-induced cardiomyopathy*; Redox Biol., **70** 103024

**PHYSICAL DATA**

Molecular Weight:	268.27
Molecular Formula:	C <sub>11</sub> H <sub>16</sub> N <sub>4</sub> O <sub>4</sub>
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (60 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**