

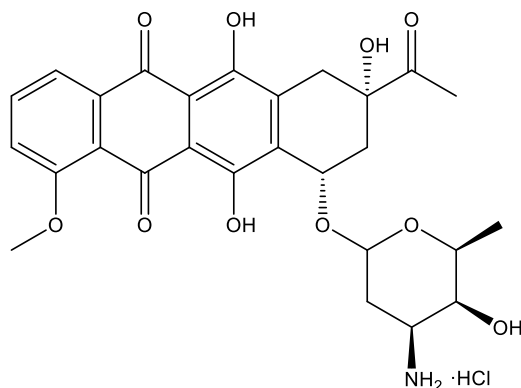
Catalog # 10-2429

Daunorubicin HCl

CAS# 23541-50-6

Daunomycin; rubidomycin; RP-13057

Lot # X101492



Antitumor antibiotic used in the treatment of acute myeloid leukemias.¹ Induces DNA damage by intercalation.² Induces apoptosis in a variety of cell lines.³ Inhibition of autophagy with chloroquine enhances daunorubicin-induced apoptosis in K562 cells.⁴ Cell permeable.

- 1) Laurent and Jaffrezou (2001), Signaling pathways activated by daunorubicin; *Blood* **98** 913
- 2) Noel *et al.* (2008), *Parallel improvement of sodium and chloride transport defects by miglustat (n-butyldeoxyxojirimycin) in cystic fibrosis*; *J. Pharmacol. Exp. Ther.*, **325** 1016
- 3) Masquelier *et al.* (2004), *Relationship between daunorubicin concentration and apoptosis induction in leukemic cells*; *Biochem.Pharmacol.* **67** 1047
- 4) Han *et al.* (2011), *Autophagy inhibition enhances daunorubicin-induced apoptosis in K562 cells*; *PLoS One* **6** e28491

PHYSICAL DATA

Molecular Weight:	563.98
Molecular Formula:	C ₂₇ H ₃₉ NO ₁₀ ·HCl
Purity:	>95% by TLC
	NMR: (Conforms)
Solubility:	Soluble in water (up to 25 mg/ml)
Physical Description:	Red solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in distilled water may be stored at -20°C for up to 3 months.

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