



Doxorubicin HCl

Data Sheet

Catalog Number:	MC11076	Product Type:	Small Molecule
Bio-Activity:	DNA damaging agent	CAS #:	25316-40-9
Research Categories:	Cell death, infectious disease, cancer		
Solubility:	Soluble in Water (up to 25 mg/ml).	Molecular Formula:	C27H29NO11 · HCl
Purity:	> 98%	Molecular Weight:	580.0
Format:	Powder	Ship Temp:	Ambient
Storage:	-20°C		

Application Notes

Description/Data:

Antitumor antibiotic. Induces DNA damage by intercalation [1] and inhibition of topoisomerase 2. Induces apoptosis in a variety of cell lines [2]. Substrate for MDR1 [3]. Cell permeable.

References:

- 1) Zeman et al. (1998), Characterization of covalent adriamycin-DNA adducts; Proc. Natl. Acad. Sci., 95 11561
- 2) Katoh et al. (1998), Vascular endothelial growth factor inhibits apoptotic death in hematopoietic cells after exposure to chemotherapeutic drugs by inducing MCL1 acting as an antiapoptotic factor; Cancer Res., 58 5565
- 3) Perez et al. (2011), Anti-MDR-1 siRNA restores chemosensitivity in chemoresistant breast carcinoma and osteosarcoma cell lines; Anticancer Res., 31 2813

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