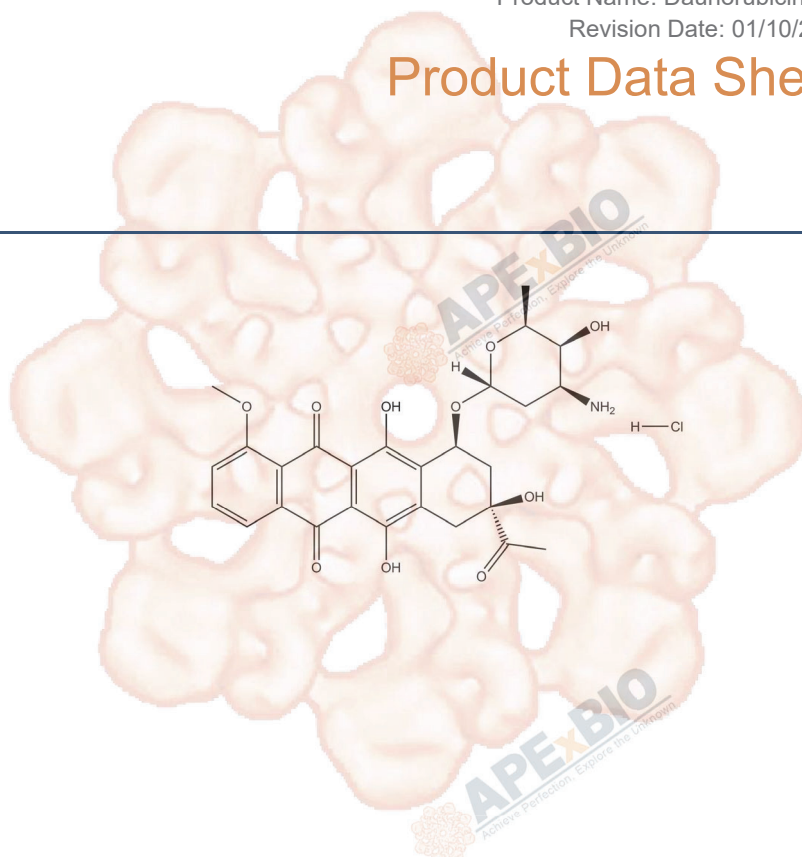


Daunorubicin HCl

Cat. No.:	B2285
CAS No.:	23541-50-6
Formula:	C ₂₇ H ₃₀ ClNO ₁₀
M.Wt:	563.98
Synonyms:	
Target:	Microbiology & Virology
Pathway:	Antibiotic
Storage:	Store at -20°C



Solvent & Solubility

≥28.2mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
	1 mM		1.7731 mL	8.8656 mL	17.7311 mL
	5 mM		0.3546 mL	1.7731 mL	3.5462 mL
	10 mM		0.1773 mL	0.8866 mL	1.7731 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

DNA topoisomerase II inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Murine melanoma cells (B16F10) and the murine fibroblast NIH/3T3
Preparation method:	The solubility of this compound in DMSO is >28.2mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	5 to 500 μM for 24 h
Applications:	Daunorubicin exerted toxicity against melanoma cells at 15 μM. Daunorubicin

	caused slight morphology alterations on fibroblast cells and inhibited cell proliferation observed by a decreased cell density when compared with untreated cells.	
In Vivo	Animal experiment	
	Animal models:	Balb-c mice
	Dosage form:	single intraperitoneal , 2.3 to 28.25 µmol/kg
	Applications:	In Balb-c mice, tumour growth inhibition was slight great in daunorubicin-treated groups at the lower dose (1.8 µmol/kg) while at the higher dose level, tumour growth inhibition under daunorubicin treatment was clearly great (7.5 µmol/kg). All the animals from saline developed metastatic nodes while 80% of daunorubicin-treated groups presented metastatic sites.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Contente TC, Kretzer IF., et al. Association of daunorubicin to a lipid nanoemulsion that binds to low-density lipoprotein receptors enhances the antitumour action and decreases the toxicity of the drug in melanoma-bearing mice. J Pharm Pharmacol. 2014 Dec;66(12):1698-709. doi: 10.1111/jphp.12296

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APEX BIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

