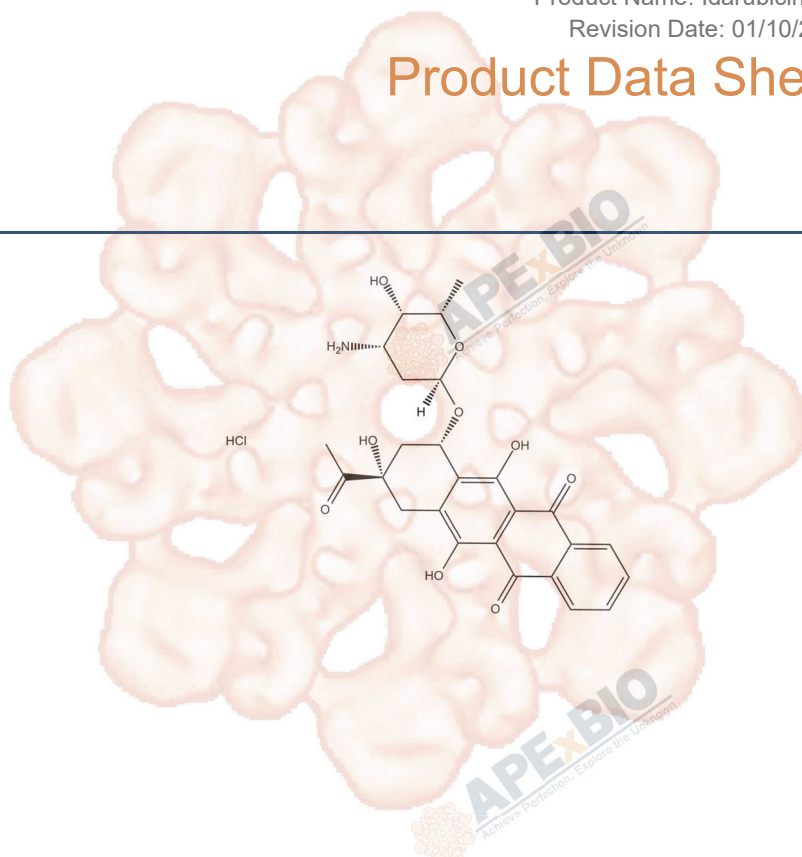


Product Data Sheet

Idarubicin HCl

Cat. No.:	A2476
CAS No.:	57852-57-0
Formula:	C ₂₆ H ₂₈ CINO ₉
M.Wt:	533.95
Synonyms:	
Target:	DNA Damage/DNA Repair
Pathway:	Topoisomerase
Storage:	Store at -20°C



Solvent & Solubility

≥ 26.7mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		1.8728 mL	9.3642 mL	18.7283 mL
	5 mM		0.3746 mL	1.8728 mL	3.7457 mL
	10 mM		0.1873 mL	0.9364 mL	1.8728 mL

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

Biological Activity

Shortsummary

Anthracycline and daunorubicin analog, topoisomerase inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: NALM-6 cells

Preparation method: The solubility of this compound in DMSO is >10 mM. 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: 0.1 nM ~ 10 µM; 24 hrs

Applications: In NALM-6 cells, Idarubicin inhibited cell proliferation with an IC₅₀ value of 12

	nM.	
In Vivo	Animal experiment	
	Animal models:	Rats, rabbits, mice and dogs
	Dosage form:	2 mg/kg, 0 mg/kg ~ 75 mg/kg, 3 mg/kg and 0 mg/kg ~ 75 mg/kg; i.v.
	Applications:	Reduction of Idarubicin was dependent upon ketone reductases, and proceeds more stereoselectivity than that of most ketones. The high stereospecificity in Idarubicin reduction might be attributed to chiral induction under the presence of asymmetric centres near to the carbonyl group in Idarubicin.
	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]. Rowland AJ, Pietersz GA, McKenzie IF. Preclinical investigation of the antitumour effects of anti-CD19-idarubicin immunoconjugates. *Cancer Immunol Immunother.* 1993 Aug;37(3):195-202.
- [2]. Strolin Benedetti M, Pianezzola E, Fraier D, Castelli MG, Dostert P. Stereoselectivity of idarubicin reduction in various animal species and humans. *Xenobiotica.* 1991 Apr;21(4):473-80.

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.



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