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Product Information

Product ID D5794

CAS No. 25316-40-9

Chemical Name (8S-cis)10-[(3-Amino-2,3,6-trideoxy-α-L-lyxo- hexopyranosyl)oxy

-7,8,9,10-tetrahydro-6,8,11- trihydroxy-8-(hydroacetyl)-1-methoxy

-5,12- naphthacenedione

Synonym Adriacin, Adriblastina, Adriamycin, Caelyx

Formula C₂₇H₂₉NO₁₁ • HCl

Formula Wt. 579.99

Melting Point 204-205°C(dec.)

Purity ≥98%

Solubility Soluble in water, methanol or aqueous alcohols. Soluble in DMSO to

10 mg/mL. Insoluble in acetone or chloroform.

OH OH ö ÓН HCI 'OH

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
D5794	5 mg	\$45.50
D5794	10 mg	\$64.90
D5794	50 mg	\$142.80

Store Temp 4°C

Ship Temp Ambient

Description Doxorubicin is an anthracycline that exhibits anticancer chemotherapeutic and anti-parasitic, antimalarial activities.

Doxorubicin is a DNA intercalator that inhibits topoisomerase II and is clinically used to treat various cancers; it is part of the CHOP and ABVD chemotherapy regimens. Doxorubicin also promotes histone H2AX eviction from chromatin, limiting DNA repair

mechanisms. Additionally, this compound inhibits growth of Plasmodium.

References Pang B, Qiao X, Janssen L, et al. Drug-induced histone eviction from open chromatin contributes to the chemotherapeutic effects of doxorubicin. Nat Commun. 2013;4:1908. PMID: 23715267.

> Tacar O, Sriamornsak P, Dass CR. Doxorubicin: an update on anticancer molecular action, toxicity and novel drug delivery systems. J Pharm Pharmacol. 2013 Feb;65(2):157-70. PMID: 23278683.

Gamo FJ, Sanz LM, Vidal J, et al. Thousands of chemical starting points for antimalarial lead identification. Nature. 2010 May 20;465(7296):305-10. PMID: 20485427.

Squillace RM, Miller D, Cookson M, et al. Antitumor activity of ridaforolimus and potential cell-cycle determinants of sensitivity in sarcoma and endometrial cancer models. Mol Cancer Ther. 2011 Oct;10(10):1959-1968. PMID: 21825008.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.