



LKT Laboratories, Inc.

Doxorubicin Hydrochloride

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

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 $C_{27}H_{29}NO_{11} \cdot HCl$

Formula Wt. 579.99

Melting Point 204-205°C(dec.)

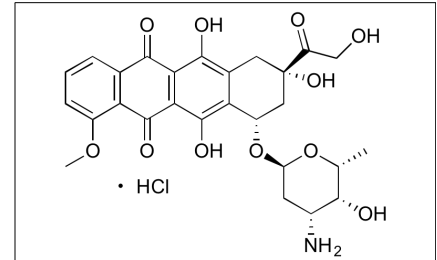
Purity $\geq 98\%$

Solubility Soluble in water, methanol or aqueous alcohols. Soluble in DMSO to 10 mg/mL. Insoluble in acetone or chloroform.

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*.



Bulk quantities available upon request

Product ID	Size
D5794	5 mg
D5794	10 mg
D5794	50 mg

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.