



# LKT Laboratories, Inc.

## Dihydrochelerythrine

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### Product Information

Product ID D3428

CAS No. 6880-91-7

Chemical Name

Synonym

Formula  $C_{21}H_{19}NO_4$

Formula Wt. 349.38

Melting Point

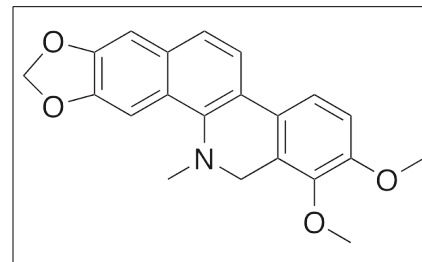
Purity  $\geq 98\%$

Solubility 10mM in DMSO  
10mM in water

Store Temp 4°C

Ship Temp Ambient

**Description** Dihydrochelerythrine (DHC) is a benzophenanthridine alkaloid originally found in the stem bark of *Garcinia*. This compound exhibits a wide variety of antimicrobial activities (anti-parasitic, antifungal, and antibacterial) as well as anticancer, analgesic, and anti-inflammatory properties. DHC is active against *Trypanosoma*, *Leishmania*, *Botrytis*, *Erysiphe*, *Candida*, and various gram positive and gram negative bacteria. Additionally, DHC induces dissipation of the mitochondrial membrane potential in leukemia cells, resulting in apoptosis and necrosis. This compound also binds DNA sequences containing contiguous G or C base pairs.



**Bulk quantities available upon request**

Product ID	Size
D3428	1 mg
D3428	5 mg
D3428	25 mg

**References** Yao JY, Zhou ZM, Li XL, et al. Antiparasitic efficacy of dihydrosanguinarine and dihydrochelerythrine from *Macleaya microcarpa* against *Ichthyophthirius multifiliis* in richadsin (*Squaliobarbus curriculus*). *Vet Parasitol.* 2011 Dec 29;183(1-2):8-13. PMID: 21813242.

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Vrba J, Dolezel P, Vicar J, et al. Chelerythrine and dihydrochelerythrine induce G1 phase arrest and bimodal cell death in human leukemia HL-60 cells. *Toxicol In Vitro.* 2008 Jun;22(4):1008-17. PMID: 18358694.

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Hu J, Zhang WD, Liu RH, et al. Benzophenanthridine alkaloids from *Zanthoxylum nitidum* (Roxb.) DC, and their analgesic and anti-inflammatory activities. *Chem Biodivers.* 2006 Sep;3(9):990-5. PMID: 17193331.

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