**Natural Products** 



**Dihydrosanguinarine Datasheet** 

5<sup>th</sup> Edition (Revised in January, 2017)

#### [ Product Information ]

Name: Dihydrosanguinarine

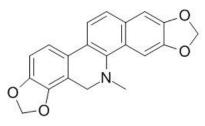
Catalog No.: CFN92810

Cas No.: 3606-45-9

**Purity:** >=95%

M.F: C<sub>20</sub>H<sub>15</sub>NO<sub>4</sub>

**M.W:** 333.1



Physical Description: Powder

**Synonyms:**13-Methyl-13,14-dihydro[1,3]benzodioxolo[5,6-c][1,3]dioxolo[4,5-i]phenanthri dine.

#### [ Intended Use ]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Agricultural research;
- 4. Synthetic precursor compounds;
- 5. Intermediates & Fine Chemicals;
- 6. Others.

# [Source]

The herbs of Chelidonium majus.

#### [Biological Activity or Inhibitors]

Dihydrosanguinarine shows cytotoxicity in human leukemia HL-60 cells, it can cause necrosis and apoptosis of HL-60 cells.<sup>[1]</sup>

Dihydrosanguinarine and dihydrochelerythrine have antiparasitic efficacy against Ichthyophthirius multifiliis in richadsin (Squaliobarbus curriculus).<sup>[2]</sup>

Dihydrosanguinarine and dihydrochelerythrine exhibit high antifungal activity against Botrytis cinerea Pers, they inhibit spore germination in vitro in a concentration-dependent manner; they also show potent protective and curative effects against Erysiphe graminis and B. cinerea in vivo. <sup>[3]</sup>

#### [ Solvent ]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

#### [ HPLC Method ]<sup>[4]</sup>

Mobile phase: Methanol-0.02M KH<sub>2</sub>PO<sub>4</sub>,gradient elution ; Flow rate:0.8 ml/min; Column temperature:Room Temperature; The wave length of determination: 289 nm.

# [ Storage ]

2-8°C, Protected from air and light, refrigerate or freeze.

# [ References ]

[1] Vrba J, Dolezel P, Vicar J, et al. Toxicol. in Vitro, 2009, 23(4):580-8.

[2] Yao J Y, Zhou Z M, Li X L, et al. Vet. Parasitol., 2011,183(1-2):8-13.

[3] Feng G, Zhang J, Liu Y Q. Nat. Prod.Res., 2011, 25(11):1082-9.

[4] Zheng J F, Jing Y, Qin M J. *Chinese Journal of Experimental Traditional Medical Formulae*, 2012, 18(21):121-4.

# [ Contact ]

#### Address:

S5-3 Building, No. 111, Dongfeng Rd., Wuhan Economic and Technological Development Zone, Wuhan, Hubei 430056, China Email: info@chemfaces.com Tel: +86-27-84237783 Fax: +86-27-84254680 Web: www.chemfaces.com Tech Support: service@chemfaces.com