

## Norcantharidin Datasheet

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

### [ Product Information ]

**Name:** Norcantharidin

**Catalog No.:** CFN99791

**Cas No.:** 5442-12-6

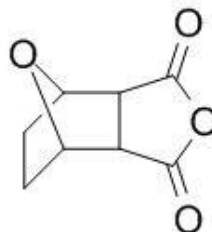
**Purity:** >=98%

**M.F:** C<sub>8</sub>H<sub>8</sub>O<sub>4</sub>

**M.W:** 168.15

**Physical Description:** White powder

**Synonyms:** Hexahydro-3,6-epoxyphthalic anhydride; Demehylcantharidin.



### [ Intended Use ]

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

### [ Source ]

The polypides of *Mylabris phalerata* Pallas.

### [ Biological Activity or Inhibitors ]

Norcantharidin(NCTD) has been used to treat human cancers in China since 1984,

NCTD-induced apoptosis in oral cancer cells may be mediated by an increase in the ratios of proapoptotic to antiapoptotic proteins, since oral cancer cells with mutant p53 or elevated Bcl-XL levels shows resistance to multiple chemotherapeutic agents, NCTD may overcome the chemoresistance of these cells and provide potential new avenues for treatment.<sup>[1]</sup>

Norcantharidin, a protein phosphatase type-2A inhibitor, which has less nephrotoxic and phlogogenic side-effects, it can inhibit both DNA synthesis and granulocyte-macrophage colony-forming cells (GM-CFC) growth and impaire the neogenesis of chromatin material and nuclear membrane during the M/G1 phase transition in K-562 cells.<sup>[2]</sup>

Norcantharidin possesses anti-angiogenetic activity with potential use in anti-cancer therapy as an anti-metastatic and anti-angiogenic agent. <sup>[3]</sup>

### **[ Solvent ]**

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

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

Mobile phase: Methanol -0.016 M Potassium dihydrogen phosphate (adjusted to pH 3.1 with phosphoric acid)=30:70 ;

Flow rate: 0.9 ml/min;

Column temperature: 30 °C;

The wave length of determination: 213 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Kok S H, Cheng S J, Hong C Y, *et al. Cancer Lett.*, 2005, 217(1):43-52.

[2] Liu X H, Blazsek I, Comisso M, *et al. Eur. J. Cancer*, 1995, 31(6):953-63.

[3] Chen Y J, Tsai Y M, Kuo C D, *et al. Life Sci.*, 2009, 85(17-18):642-51.

[4] Li C, Zhao G, Yuan Y. *Chinese Pharmaceutical Journal*, 2007, 42(6):469-72.

## **[ Contact ]**

**Address:**

S5-3 Building, No. 111, Dongfeng Rd.,  
Wuhan Economic and Technological Development Zone,  
Wuhan, Hubei 430056,  
China

**Email:** [info@chemfaces.com](mailto:info@chemfaces.com)

**Tel:** +86-27-84237783

**Fax:** +86-27-84254680

**Web:** [www.chemfaces.com](http://www.chemfaces.com)

**Tech Support:** [service@chemfaces.com](mailto:service@chemfaces.com)