

## Oridonin Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Oridonin

**Catalog No.:** CFN99164

**Cas No.:** 28957-04-2

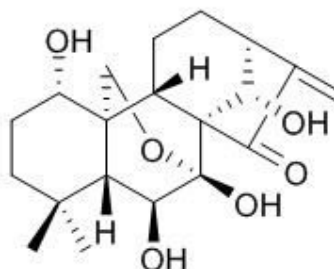
**Purity:** > 98%

**M.F:** C<sub>20</sub>H<sub>28</sub>O<sub>6</sub>

**M.W:** 364.43

**Physical Description:** Yellow cryst.

**Synonyms:** (1S,4AR,5S,6S,14S)-1,5,6,14-Tetrahydroxy-4,4-dimethyl-8-methylenedecahydro-1H-6,11b-(epoxymethano)-6a,9-methanocyclohepta[a]naphthalen-7(8H)-one.



### [ Intended Use ]

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

### [ Source ]

The herb of *Rabdosia rubescens* (Hamst.) C.Y.Wu et Hsuan.

### [ Biological Activity or Inhibitors ]

Oridonin inhibits the proliferation of cancer cells via apoptosis and cell cycle arrest with p53 playing a central role in several cancer types which express the wild-type p53 gene, it may be a novel, adjunctive therapy for a large variety of malignancies and probably represents one of the major, active components of PC-SPES( an eight herbal mixture that was shown to have activity against prostate cancer).[<sup>1</sup>]

Oridonin may be a potential antileukemia agent that targets AE oncoprotein at residue D188 with low adverse effect, and may be helpful for the treatment of patients with t(8;21) acute myeloid leukemic (AML).[<sup>2</sup>]

Oridonin confers protection against arsenic-induced toxicity through activation of the Nrf2-mediated defensive response, and the feasibility of using natural compounds targeting Nrf2 as a therapeutic approach to protect humans from various environmental insults that may occur daily.[<sup>3</sup>]

Oridonin remarkably suppresses activations of Akt/mTOR, Raf/MEK and STAT5 pathway in these primary specimens and oridonin with imatinib exerts synergetic suppressive effects on mTOR, STAT5 and LYN signaling in one imatinib resistant patient specimen. [<sup>4</sup>]

## **[ Solvent ]**

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

## **[ HPLC Method ]**<sup>[5]</sup>

Mobile phase: Methanol : H<sub>2</sub>O=50:50;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 241 nm.

## **[ Storage ]**

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

## **[ References ]**

- [1] Ikezoe T, Chen S S, Tong X J, *et al. Int. J. Oncol.*, 2003, 23(4):1187-93.
- [2] Zhou G B, Kang H, Wang L, *et al. Blood*, 2007, 109(8):3441-50.
- [3] Du Y, Villeneuve N F, Wang X J, *et al. Environ. Health Persp.*, 2008, 116(9):1154-61.
- [4] Yong G, Shan Q, Gong Y, *et al. Cancer Biol. Ther.*, 2012, 13(13):1244-54.
- [5] Mei Y, Jie X, Zhao J, *et al. J. Chromatogr. B.*, 2008, 869(1-2):138-41.

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