

## Triptolide Datasheet

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

### [ Product Information ]

**Name:** Triptolide

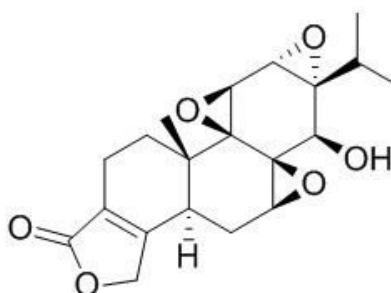
**Catalog No.:** CFN99196

**Cas No.:** 38748-32-2

**Purity:** >=98%

**M.F:** C<sub>20</sub>H<sub>24</sub>O<sub>6</sub>

**M.W:** 376.40



**Physical Description:** White powder

**Synonyms:** (-)-(3bS,4aS,5aS,6R,6aR,7aS,7bS,8aS,8bS)-3b,4,4a,6,6a,7a,7b,8b,9,10-Dehydro-6-hydroxy-6a-isopropyl-8b-methyltrisoxireno[4b,5:6,7:8a,9]phenanthro[1,2-c]furan-1(3H)-one.

### [ Intended Use ]

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

### [ Source ]

The herb of *Tripterygium wilfordii* Hook.f.

### [ Biological Activity or Inhibitors ]

Triptolide is the major active component in the extract of *Tripterygium wilfordii* Hook. f (TWHf) that inhibits antigen or mitogen-induced T cell proliferation, triptolide induces T cell apoptosis through activating caspases, and suggest the growth arrest and apoptotic effect of triptolide may contribute to the immunosuppressive activity of TWHf extract.<sup>[1]</sup>

Triptolide has antitumor properties, it has a broad spectrum of activity against tumors that contain both wild-type and mutant forms of p53.<sup>[2]</sup>

Triptolide is a promising immunosuppressive and anti-inflammatory agent, it has inhibitory effects on a variety of proinflammatory cytokines and mediators and on the expression of adhesion molecules by endothelial cells, it is effective for the treatment of a variety of autoimmune diseases and in prevention of allograft rejection and graft-versus-host disease in both animals and humans; moreover, triptolide possesses toxicity and male anti-fertility effect.<sup>[3]</sup>

## **[ Solvent ]**

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

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

Mobile phase: Ethanol- H<sub>2</sub>O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 255 nm.

## **[ Storage ]**

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

## **[ References ]**

[1] Yang Y, Liu Z, Tolosa E, *et al. Immunopharmacology*, 1998, 40(2):139-49.

[2] Yang S, Chen J, Guo Z, *et al. Mol. Cancer Ther.*, 2003, 2(1):65-72.

[3] Chen B J. *Leuk. Lymphoma*, 2001, 42(3):253-65.

[4] Pu C H, He M F, Zhanag X Q, *et al. Zhongguo Zhong yao za zhi*, 2005, 30(4):266-7.

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