

## Polyporenic acid C Datasheet

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

### [ Product Information ]

**Name:** Polyporenic acid C

**Catalog No.:** CFN92739

**Cas No.:** 465-18-9

**Purity:** > 95%

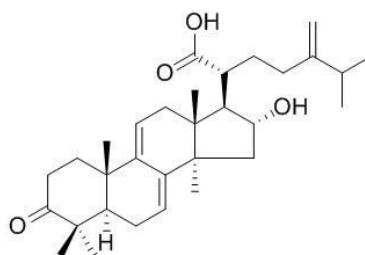
**M.F:** C<sub>31</sub>H<sub>46</sub>O<sub>4</sub>

**M.W:** 482.69

**Physical Description:** Powder

**Synonyms:** 16  $\alpha$  -Hydroxy-24-methylene-3-oxo-5  $\alpha$  -lanosta-7,9(11)-dien-21-oic acid;

3-Oxo-16  $\alpha$  -hydroxy-24-methylene-5  $\alpha$  -lanosta-7,9(11)-diene-21-oic acid.



### [ Intended Use ]

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

### [ Source ]

The root of *Wolfiporia cocos* (Schw.) Ryv.

### [ Biological Activity or Inhibitors ]

Polyporenic acid C (PPAC), a lanostane-type triterpenoid from *P. cocos*, has inhibitory on the growth of A549 nonsmall cell lung cancer cells (NSCLC), PPAC induces apoptosis through the death receptor-mediated apoptotic pathway where the activation of caspase-8 leads to the direct cleavage of execution caspases without the involvement of the mitochondria; furthermore, suppressed PI3-kinase/Akt signal pathway and enhanced p53 activation after PPAC treatment suggests this to be an additional mechanism for apoptosis induction.<sup>[1]</sup>

Polyporenic acid C has antibacterial activity.<sup>[2]</sup>

Polyporenic acid C not only shows inhibitory activities as potent as etoposide used as a positive control on DNA topoisomerase II (36.1% inhibition at a concentration of 20  $\mu$ M), but also inhibition of DNA topoisomerase I (55.8% inhibition at a concentration of 100  $\mu$ M), against a human colon carcinoma cell line. <sup>[3]</sup>

## **[ Solvent ]**

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

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

Mobile phase: Acetonitrile- 0.05% H<sub>3</sub>PO<sub>4</sub> in water, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 35 °C;

The wave length of determination: 243nm.

## **[ Storage ]**

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

## **[ References ]**

[1] Ling H, Zhou L, Jia X, *et al. Mol. Carcinogen.*, 2009, 48(6):498–507.

[2] Marcus S. *Biochem.J.*, 1952, 50(4):516-7.

[3] Li G, Xu M L, Lee C S, *et al. Arch. Pharm. Res.*, 2004, 27(8):829-33.

[4] Huan Y, Shen Y P, Chen B, *et al. J. Liq. Chromatogr. R.T.*, 2011, 34(16):1772-82.

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