

# **Corytuberine Datasheet**

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

### [ Product Information ]

Name: Corytuberine

Catalog No.: CFN90528

Cas No.: 517-56-6

**Purity:** > 98%

M.F: C<sub>19</sub>H<sub>21</sub>NO<sub>4</sub>

M.W: 327.37

Physical Description: Powder

**Synonyms:**(6aS)-2,10-Dimethoxy-6-methyl-5,6,6a,7-tetrahydro-4H-dibenzo[de,g]quinolin e-1,11-diol;2,10-Dimethoxy-6aa-aporphine-1,11-diol.

HO

HO

#### [ Intended Use ]

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

#### [Source]

The herbs of Caltha palustris L.

[ Biological Activity or Inhibitors]

Corytuberine is a potent lipoxygenase inhibitor, the mechanism of lipoxygenase inhibition

by it may be linked to the inhibition of lipid hydroperoxide substrate accumulation,

products of lipoxygenase metabolism play a role in the pathogenesis of psoriasis, thus,

corytuberine may contribute to the therapeutic effect of psoriasis.[1]

Corytuberine is a malonyl-CoA:acyl carrier protein transacylase (MCAT) inhibitor, it may

be used as a potential lead compound in the discovery of the antibacterial agents using

Helicobacter pylori strain SS1 (HpMCAT) as target. [2]

Corytuberine (6.3 and 12.5 mg/kg, i.p.) shows very strong antinociceptive activity. [3]

Corytuberine displays cytotoxicity against SMMC-7721 with IC<sub>50</sub> values of 73.22 ± 2.35 u

 $M.^{[4]}$ 

[Solvent]

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

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

Mobile phase: Acetonitrile-0.2% Phosphoric acid and 0.4% BmimBF4 in water adjusted to

pH 6.3 by the addition of triethylamine solution, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 270 nm.

[Storage]

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

[References]

[1] Misík V, Bezáková L, Máleková L, et al. Planta Med., 1995, 61(4):372-3.

- [2] Liu W, Han C, Hu L, et al. Febs Lett., 2006, 580(580):697-702.
- [3] Nishiyama Y, Moriyasu M, Ichimaru M, et al. J. Nat. Med., 2009, 64(1):9-15.
- [4] Sun R, Jiang H, Zhang W, et al. Evid. Based Complement. Alternat .Med. 2014;2014: 580483.
- [5] Chen Y, Li R, Gao R, et al. Anal. Methods-UK, 2016, 8(12):2645-52.

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