

## Desmethoxy yangonin Datasheet

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

### [ Product Information ]

**Name:** Desmethoxy yangonin

**Catalog No.:** CFN90149

**Cas No.:** 15345-89-8

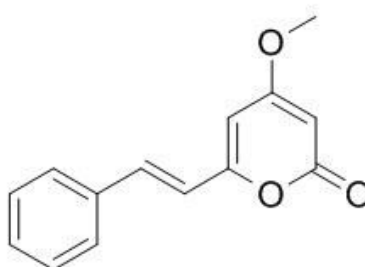
**Purity:** >=98%

**M.F:** C<sub>14</sub>H<sub>12</sub>O<sub>3</sub>

**M.W:** 228.24

**Physical Description:** Powder

**Synonyms:** 4-Methoxy-6-(2-phenylethyl)-5,6-dihydro-2H-pyran-2-one.



### [ Intended Use ]

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

### [ Source ]

The roots of *Piper methysticum* Forst.

### [ Biological Activity or Inhibitors ]

Desmethoxyyangonin and dihydromethysticin are two major pharmacological

kavalactones with marked activity on the induction of CYP3A23.<sup>[1]</sup>

Desmethoxyyangonin displays strong inhibition of MAO-A and -B (K<sub>i</sub> values 0.922 and 0.031 μM, respectively), with about 30 fold more selectivity against MAO-B, selective reversible inhibitors of MAO-B have important therapeutic value for treatment of neurodegenerative disorders and Parkinson's Disease.<sup>[2]</sup>

Desmethoxyyangonin protects lipopolysaccharide (LPS) or LPS/D-galactosamine (LPS/D-GalN)-induced damages in cell or liver tissues mainly through de-regulating IKK/NFκB and Jak2/STAT3 signaling pathways. <sup>[3]</sup>

### **[ Solvent ]**

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

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

Mobile phase: H<sub>2</sub>O-Acetonitrile-Reagent alcohol=65:20:15 ;

Flow rate: 0.75 ml/min;

Column temperature: 40 °C;

The wave length of determination: 246 nm.

### **[ Storage ]**

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

### **[ References ]**

[1] Ma Y, Sachdeva K, Liu J, *et al. Drug Metab. Dispos.*, 2004,32(11):1317-24.

[2] Chaurasiya N D, León F, Gómez-Betancur I, *et al. Planta Med.*, 2015, 81 - PB19

[3] Chou T W, Feng J H, Huang C C, *et al. Plos One*, 2013, 8(10):e77626.

[4] J. R. Mikell, B. T. Schaneberg, I. A. Khan. *J. Liq. Chromatogr. R.T.*, 2003, 26(18): 3069-74.

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