

# **Moracin M Datasheet**

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

OH

### [ Product Information ]

Name: Moracin M

Catalog No.: CFN92327

Cas No.: 56317-21-6

**Purity:** > 95%

**M.F:** C<sub>14</sub>H<sub>10</sub>O<sub>4</sub>

M.W: 242.2

Physical Description: Powder

**Synonyms:** 5-(6-Hydroxy-1-benzofuran-2-yl)benzene-1,3-diol.

### [ Intended Use ]

1. Reference standards;

2. Pharmacological research;

3. Synthetic precursor compounds;

4. Intermediates & Fine Chemicals;

5. Others.

## [Source]

The root bark of Morus alba L.

# [ Biological Activity or Inhibitors]

Moracin M, extracted from Chinese herbal drug 'Sang-Bai-Pi' (Morus alba L.), has the

inhibitory affinity towards phosphodiesterase-4 (PDE4), it inhibits PDE4D2, PDE4B2,

PDE5A1, and PDE9A2 with the IC(50) values of 2.9, 4.5, >40, and >100 uM,

respectively.[1]

Moracin M can inhibit interleukin (IL)-6 production from IL-1β-treated lung epithelial cells

(A549) with IC 50 is 8.102uM, it can inhibit airway inflammation in vitro and in vivo, and it

has therapeutic potential for treating lung inflammatory disorders.<sup>[2]</sup>

Moracin treatment can inhibit the double 12-O-tetradecanoylphorbol 13-acetate (TPA)

treatment-induced morphological changes reflecting inflammatory response, including

leucocyte infiltration, hyperplasia and cell proliferation; moracin treatment furthermore can

significantly suppress the elevation in 4-HNE level and elevate expression of c-fos, c-myc

and cycloxygenase-2 (COX-2) in normal epidermis induced by double application of TPA;

the moracin may be protective influence in tumor promotion, utilization of Moracin may

open a new avenue in the treatment of tumerigenesis. [3]

[Solvent]

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

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

Mobile phase: Acetonitrile- 0.05% Phosphoric acid H2O, gradient elution;

Flow rate: 0.8 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 310 nm.

[Storage]

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

[References]

[1] Chen S K, Zhao P, Shao Y X, et al. Bioorg. Med. Chem. Lett., 2012, 22(9):3261-4.

- [2] Lee J H, Ko H J, Woo E R, et al. Eur. J.Pharmacol., 2016, 783:64-72.
- [3] Khyade V B, Lonkar U D. Annals of Plant Sciences, 2013,2(10):412-9.

[4] Won C S, Jeong J Y, Jin L Y, et al. Prev. Nutr. Food Sci., 2013, 18(4):256-62.

# [ Contact ]

Address:

S5-3 Building, No. 111, Dongfeng Rd.,

Wuhan Economic and Technological Development Zone,

Wuhan, Hubei 430056,

China

Email: info@chemfaces.com

**Tel:** +86-27-84237783 **Fax:** +86-27-84254680

Web: www.chemfaces.com

Tech Support: service@chemfaces.com