

# **Reticuline Datasheet**

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

## [ Product Information ]

Name: Reticuline

Catalog No.: CFN98767

Cas No.: 485-19-8

**Purity: >98%** 

M.F: C<sub>19</sub>H<sub>23</sub>NO<sub>4</sub>

M.W: 329.40

Physical Description: Powder

**Synonyms:**(S)-1,2,3,4-tetrahydro-1-[(3-hydroxy-4-methoxyphenyl)methyl]-6-methoxy-2-methylisoquinolin-7-ol;(1S)-1-[(3-hydroxy-4-methoxy-phenyl)methyl]-6-methoxy-2-methyl-3,4-dihydro-1H-isoquinolin-7-ol;(S)-Reticuline;2-Methoxy-5-[[(1S)-2-methyl-6-methoxy-7-hydroxy-1,2,3,4-tetrahydroisoquinoline]-1-ylmethyl]phenol.

HO

### [ Intended Use ]

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

#### [Source]

The root of Thalictrum foliolosum.

[ Biological Activity or Inhibitors]

Reticuline is a key compound in the biosynthetic pathway for isoquinoline alkaloids in

plants, which include morphine, codeine and berberine..<sup>[1]</sup>

L-DOPA and reticuline exposure increases ganglionic morphine levels invivo and in vitro.[2]

Reticuline possesses potent central nervous system depressant action, it (50-100 mg/kg

i.p.) can produce alteration of behaviour pattern, prolongation of pentobarbital-induced

sleep, reduction in motor coordination and D-amphetamine-induced hypermotility and

suppression of the conditioned avoidance response. [3]

(S)-Reticuline can elicit vasorelaxation probably due to the blockade of the L-type

voltage-dependent Ca(2+) current in rat aorta, the effect may contribute to the potential

cardioprotective efficacy of (S)-reticuline.[4]

[Solvent]

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

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

**HPLC-MS** 

Mobile phase: 0.1%TFA in water- Meathnol, gradient eiution;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

Ion source temperature: 200 °C;

Detector voltage: 1.5 kV;

CDL voltage: 15 V.

[Storage]

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

#### [References]

- [1] Fujii N, Inui T, Iwasa K, et al. Transgenic Res., 2007, 16(3):363-75.
- [2] Zhu W, Mantione K J, Shen L, et al. Medical Science Monitor International Medical Journal of Experimental & Clinical Research, 2005, 11(5):MS1-5.
- [3] Morais L C S L, Barbosa-Filho J M, Almeida R N. *J.Ethnopharmacol.*, 1998, 62(1):57-61.
- [4] Medeiros M A A, Nunes X P, Barbosa-Filho J M, et al. N.-S. Arch. Pharmacol., 2009, 379(2):115-25.
- [5] Kim T J, Seo E Y, Yu S J, et al. Korean Journal of Pharmacognosy, 2012, 43(1):16-21.

#### [ 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