

Dictamnine Datasheet

5th Edition (Revised in January, 2017)

[Product Information]

Name: Dictamnine

Catalog No.: CFN99783

Cas No.: 484-29-7

Purity: >=98%

M.F: C₁₂H₉NO₂

M.W: 199.21

Physical Description: Powder

Synonyms:4-Methoxyfuro[2,3-b]quinoline.

[Intended Use]

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

[Source]

The root barks of Dictamnus dasycarpus Turcz.

[Biological Activity or Inhibitors]

Dictamnine and gamma-fagarine have mutagenic activities, they have specific activities

(His+/microgram) of about 50-70 revertant colonies in strain TA100, while in strain TA98

there were about 30-50 revertant colonies.[1]

Dictamnine has good antifungal activity alone and in combination with fluconazole against

Candida albicans.[2]

Dictamnine at higher concentrations(≥100uM) has potential hepatotoxicity, the cell

membrane damage and mitochondrial membrane damage may be involved in the

dictamnine-induced hepatotoxity mechanism.[3]

Dictamnine has photoinduced genotoxicity.[4]

Dictamnine shows anti-inflammatory effect.^[5]

Dictamnine shows anticholinesterase activityt. [6]

[Solvent]

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

[HPLC Method]^[7]

Mobile phase: 0.1% Phosphoric acid in water- Acetonitrile, gradient elution;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 238 nm.

[Storage]

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

[References]

[1] Mizuta M, Kanamori H. Mutat. Res., 1985, 144(4):221-5.

[2] Liang X, Guo N, Wang L, et al. Chinese Agricultural Science Bulletin, 2009, 25(16):

21-4.

[3] Guo X P, Li A F, Zhang B X, et al. Chinese Journal of Pharmacology & Toxicology, 2013,

27(1):95-100.

[4] Fujita H, Kakishima H. Chem. Biol. Interact., 1989;72(1-2):105-11.

[5] Shi D F, Zheng M Z, Zhao L C, et al. Chinese Journal of Experimental Traditional Medical Formulae, 2012, 18(14):128-31.

[6] Cabral R S, Sartori M C, Cordeiro I, et al. Rev. Bras. Farmacogn., 2012, 22(2):374-80.

[7] Zhu L X, Wang X, Zhang H Y, et al. Chinese Archives of Traditional Chinese Medicine, 2013, 12:2706-8.

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