

Obtusifolin Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Obtusifolin

Catalog No.: CFN90394

Cas No.: 477-85-0

Purity: >=98%

M.F: $C_{16}H_{12}O_5$

M.W: 284.27

Physical Description: Powder

Synonyms:9,10-Anthracenedione,2,8-dihydroxy-1-methoxy-3-methyl-;Anthraquinone,2,8

-dihydroxy-1-methoxy-3-methyl- (6CI).

[Intended Use]

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

[Source]

The seeds of Cassia obtusifolia L.

[Biological Activity or Inhibitors]

Gluco-obtusifolin and its aglycone, obtusifolin may be useful for the treatment of cognitive

impairment, and that its beneficial effects are mediated, in part, by the enhancement of

cholinergic signaling.[1]

Obtusifolin and gluco-obtusifolin produce significant antinociceptive action in rodent

behavioral models of inflammatory/neuropathic pain, and that this activity is associated

with modulation of neuroinflammation in spinal cord. [2]

Obtusifolin has antioxidant properties, the long-term administration of obtusifolin has

beneficial effects on the development of diabetic retinopathy via inhibition of accumulation

of oxidatively modified DNA and nitrotyrosine in the retina, it represents an achievable

adjunct therapy to help prevent vision loss in diabetic patients.[3]

Obtusifolin, a major bioactive compound present in Cassia tora L., suppresses phthalate

esters-induced breast cancer bone metastasis by targeting parathyroid hormone-related

protein, therefore, it may be a novel anti-breast-cancer bone metastasis agent.^[4]

Obtusifolin treatment improves hyperlipidemia and hyperglycemia and its complications

by modulation of oxidative stress.^[5]

[Solvent]

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

[HPLC Method]^[6]

Mobile phase: H2O- Acetonitrile- Tetramethylene oxide- Glacial acetic acid=100:23:5:1;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 278 nm.

[Storage]

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

[References]

- [1] Kim D H, Hyun S K, Yoon B H, et al. J.Pharmacol.Sci., 2009, 111(2):110-6.
- [2] He Z W, Wei W, Li S P, et al. Biol. Pharmaceut. Bul., 2014, 37(10):1606-16.
- [3] Hou B, He S, Gong Y, et al. Cell Biochem. Biophs., 2014, 70(3):1655-61.
- [4] Hsu Y L, Tsai E M, Hou M F, et al. J. Agr. Food Chem., 2014, 62(49):11933-40.
- [5] Tang Y, Zhong Z. Cell Biochem. Biophy., 2014, 70(3):1751-7.
- [6] Su H J, Wang Z, Tang L. China Journal of Chinese Materia Medica, 2011, 36(10): 1327-9.

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