Natural Products



Catalpalactone Datasheet

5th Edition (Revised in January, 2017)

[Product Information]

Name: Catalpalactone

Catalog No.: CFN99670

Cas No.: 1585-68-8

Purity: > 95%

M.F: $C_{15}H_{14}O_4$

M.W: 258.3

Physical Description: Powder

Synonyms:3-(2,2-Dimethyl-6-oxo-3H-pyran-5-yl)-3H-2-benzofuran-1-one.

[Intended Use]

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

[Source]

The wood of Catalpa ovata.

[Biological Activity or Inhibitors]

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Catalpalactone can inhibit dopamine biosynthesis by reducing tyrosine hydroxylase (TH) and aromatic-I-amino acid decarboxylase (AADC) activities and enhance L-DOPA-induced cytotoxiciy in PC12 cells.<sup>[1]</sup>
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Catalpalactone displays good cytotoxicity activities against two human tumor cell lines(MCF-7,BxPC3).^[2]

Catalpalactone exhibits significant inhibitory activity against 12-O-tetradecanoylphorbol 13-acetate (TPA)-induced Epstein-Barr virus early antigen (EBV-EA) activation in Raji cells.^[3]

Catapalactone exhibits potent inhibitory effects on lipopolysaccharide-induced NO synthesis in RAW 264.7 cells , with IC_{50} values of 9.80 microM.^[4]

Catalpalactone exhibits high antitermitic activity.^[5]

[Solvent]

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

[HPLC Method]

Not data available.

[Storage]

 $2\text{-}8^\circ\!\mathbb{C},$ Protected from air and light, refrigerate or freeze.

[References]

[1] Huang H S, Han X H, Hwang B Y, et al. Environ. Toxicol. Pharmacol., 2008, 26(1):

86-91.

[2] Zhao J C, Ding N, Zhang W, et al. Periodical of Ocean University of China, 2012, 42:

127-45.

[3] Fujiwara A, Mori T, Iida A, et al. J. Nat. Prod., 1998, 61(5):629-32.

[4] Park B M, Hong S S, Lee C, et al. Arch. Pharm. Res., 2010, 33(3):381-5.

[5] Mcdaniel C A. J. Chem. Ecol., 1992, 18(3):359-69.

[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