

Alpinumisoflavone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Alpinumisoflavone

Catalog No.: CFN98440

Cas No.: 34086-50-5

Purity: > 95%

M.F: C₂₀H₁₆O₅

M.W: 336.34

Physical Description: Powder

Synonyms:5-Hydroxy-7-(4-hydroxyphenyl)-2,2-dimethyl-2H,6H-pyrano[3,2-g]chromen-6-

one.

[Intended Use]

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

[Source]

The herbs of Genista pichisermolliana.

[Biological Activity or Inhibitors]

Alpinumisoflavone and abyssinone V-4'-methyl ether are endowed with estrogenic

properties accounting, at least in part, for E. lysistemon effects.[1]

Alpinumisoflavone can induce cell death of human lung tumor cells by apoptosis, it also

represses lipopolysaccharide (LPS)-induced nitric oxide (NO) production in RAW264.7

cells by inhibiting NF-kB-dependent transcription, therefore, the cell death induced by

alpinumisoflavone may be via repressing both the ERK/MAPK and NF-kB pathways.[2]

Alpinumisoflavone and abyssinone V 4'-methylether can induce analogous effects on lipid

profile and decrease atherogenic risks, they downregulates the mRNA expression of Esr1,

a gene associated with cholesterogenesis and cholesterol gallstone formation and may

also promote the conversion of cholesterol into bile acids as they upregulated Cyp7a1

61mRNA expression; thus, their atheroprotective effects may result from their ability to

upregulate mechanisms promoting HDL-cholesterol and bile acid formation. [3]

Alpinumisoflavone, abyssione-V 4'-O-methyl ether, 6,8-diprenylgenistein, and burttinone

are active against both Gram-negative and Gram-positive bacteria, the minimum inhibitory

concentration values obtained (MIC) ranged from 3.9 ug/mL to 125 ug/mL.[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: 0.1% Formic acid in water- 0.1% Formic acid in acetonitrile, gradient

elution;

Flow rate: 0.5 ml/min;

Column temperature: 25 °C;

The wave length of determination: 260 nm.

[Storage]

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

[References]

- [1] Mvondo M A, Njamen D, Tanee F S, et al. Phytother. Res., 2012, 26(7):1029-36.
- [2] Namkoong S, Kim T J, Jang I S, et al. Biol. Pharm. Bull., 2011, 34(2):203-8.
- [3] Mvondo M A, Njamen D, Kretzschmar G, et al. J. Pharm. Pharmacol., 2015, 67(7): 990-6.
- [4] Chukwujekwu J C, Heerden F R V, Staden J V. Phytother. Res., 2011, 25(1):46-8.
- [5] Bórquez J, Kennelly E J, Simirgiotis M J. Food Res. Int., 2013, 52(1):288-97.

[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