Natural Products



Bavachalcone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Bavachalcone

Catalog No.: CFN92221

Cas No.: 28448-85-3

Purity: > 95%

M.F: C₂₀H₂₀O₄

M.W: 324.37

. 324.37

Physical Description: Yellow powder

 $\textbf{Synonyms:} (2\mathsf{E}) - 1 - [2, 4 - dihydroxy - 5 - (3 - methylbut - 2 - en - 1 - yl)phenyl] - 3 - (4 - hydroxyphenyl)pr$

op-2-en-1-one.

[Intended Use]

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

[Source]

The seeds of Psoralea corylifolia L.



[Biological Activity or Inhibitors]

Bavachalcone, isolated from Psoralea corylifolia, it inhibits osteoclast differentiation through suppression of NFATc1 induction by receptor activator of nuclear factor kappaB ligand (RANKL), suggests that it may be useful as a therapeutic drug for bone resorption-associated diseases.^[1]

Bavachalcone can protect the endothelial function by increasing AMPK activity and MnSOD expression and reducing mitochondrial oxidative stress.^[2]

Bavachalcone enhances ROR α expression, controls bmal1 circadian transcription, and depresses cellular senescence in human endothelial cells. ^[3]

Bavachalcone displays the most potent cytotoxic activity against K562 with $\ensuremath{\mathsf{IC}_{50}}$ value of

2.7 uM, it inhibits the proliferation of K562 cells by inducing apoptosis.^[4]

[Solvent]

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

[HPLC Method]^[5]

Mobile phase: Acetonitrile - H2O, gradient elution ; Flow rate: 1.0 ml/min; Column temperature: 35 ℃; The wave length of determination: 250 nm.

[Storage]

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

[References]

[1] Park C, Lee Y E, Lee M, et al. Biochem. Pharmacol., 2008, 75(11):2175-82.

- [2] Dang Y, Ling S, Duan J, et al. Pharmacology, 2015, 95(3-4):105-10.
- [3] Dang Y, Ling S, Ma J, et al. Evid.-based Compl. Alt., 2015, 2015: 920431.

[4] Wang H M, Zhang L, Liu J, et al. Eur. J. Med. Chem., 2015, 92C(92C):439-48.
[5] Yan C, Wu Y, Weng Z, et al. J. Anal.Methods. Chem., 2015, 2015(23):1-7.

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