

Methylinderone Datasheet

4th Edition (Revised in July, 2016)

[Product Information]

Name: Methylinderone

Catalog No.: CFN98631

Cas No.: 3984-73-4

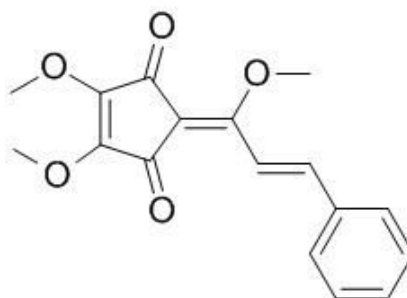
Purity: > 95%

M.F: C₁₇H₁₆O₅

M.W: 300.3

Physical Description: Powder

Synonyms:



[Intended Use]

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

[Source]

The roots of *Lindera aggregata*(Sims) Kosterm.

[Biological Activity or Inhibitors]

Methylinderone can inhibit farnesyl protein transferase with IC₅₀ value of

55.3±4.1µM and selectively inhibit the growth of H-ras-transformed rat-2 cell lines with a GI50 value of 0.3 µM; it also can strongly inhibit the growth of human cancer cells and colon tumor xenografted in nude mice; suggests that methyllicidone can be a potential anti-cancer agent against H-ras-transformed tumor and will also be a good lead molecule for the development of anti-tumor drug.^[1]

Methyllicidone has antioxidant property.^[2]

Methyllicidone, licidone and kanakugiol are potent chitin synthase 2 inhibitors, they show moderate to weak antifungal activities against various pathogenic fungi (MIC: 8 - >128 µg/mL) including *Cryptococcus neoformans*, *Aspergillus fumigatus*, and *Colletotrichum lagenarium*, indicates that they are specific inhibitors of chitin synthase 2 and can potentially serve as antifungal agents. ^[3]

Methyllicidone shows significant cytotoxicity against mouse melanoma (B16-F10), human acetabulum fibrosarcoma (HT1080), and chronic myelogenous leukemia (K562) cancer cell lines with ED₅₀ values of 2.2, 2.5, 8.3 µg/ml, respectively.^[4]

Methyllicidone is a human chymase inhibitor.^[5]

[Solvent]

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

[HPLC Method]^[6]

Mobile phase: Acetonitrile-H₂O, gradient elution ;

Flow rate: 1.0 ml/min;

Column temperature: 25 °C;

The wave length of determination: 300 nm.

[Storage]

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

[References]

- [1] Oh H M, Choi S K, Lee J M, *et al. Bioorg. Med. Chem.*, 2005, 13(22):6182-7.
- [2] Serobatse K R N. *Mol. Phys.*, 2015, 113(7):683-97.
- [3] Hwang E I, Lee Y M, Lee S M, *et al. Planta Med.*, 2007, 73(7):679-82.
- [4] Sang M L, Lee B C H, Lee H B, *et al. Nat. Prod. Sci.*, 2002, 8(3):100-2.
- [5] Tatsch K, Leisner B, Thoenes G H, *et al. Contrib. Nephrol.*, 1987, 56(13):1695-7.
- [6] Wang F, Gao Y, Zhang L, *et al. ChemInform*, 2010, 12(38):2354-7.

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