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3rd Edition (Revised in January, 2014)

[Product Information]

Name: Medioresinol

Catalog No.: CFN98641

Cas No.: 40957-99-1

Purity: > 98%

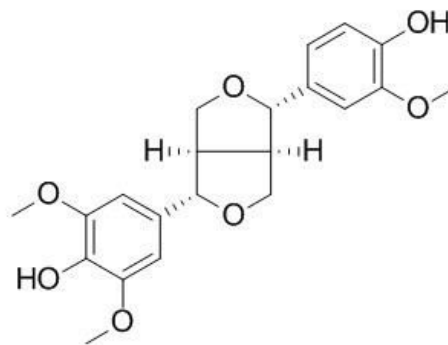
M.F: C₂₁H₂₄O₇

M.W: 388.4

Physical Description: Powder

Synonyms:

4-[(3S,3aR,6S,6aR)-3-(4-hydroxy-3-methoxyphenyl)-1,3,3a,4,6,6a-hexahydrofuro[3,4-c]furan-6-yl]-2,6-dimethoxyphenol; 2,6-Dimethoxy-4[tetrahydro-4-(4-hydroxy-3-methoxyphenyl)-1H,3H-furo[3,4-c]furan-1-yl]phenol; 2-(4-Hydroxy-3,5-dimethoxyphenyl)-6-(4-hydroxy-3-methoxyphenyl)-3,7-dioxabicyclo[3.3.1]octane; 4,4'-Dihydroxy-3,3',5-trimethoxy-7,9':7',9-diepoxy lignan



[Intended Use]

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

5. Others.

[Source]

The herbs of *Allamanda neriifolia*

[Applications]

Medioresinol is known to possess a leishmanicidal activity and cardiovascular disease risk reduction.

These apoptotic phenomena represent that oxidative stress and mitochondria dysfunctions by inducing the phytochemical (+)-Medioresinol must be an important factors of the apoptotic process in *C. albicans*. These results support the elucidation of the underlying antifungal mechanisms of (+)-Medioresinol.

(+)-Medioresinol possessed antibacterial effects against antibiotics-susceptible- or antibiotics-resistant strains. Most of combinations between (+)-Medioresinol and each antibiotic showed synergistic interaction (fractional inhibitory concentration index ≤ 0.5) against bacterial strains including antibiotics-resistant *Pseudomonas aeruginosa*. Furthermore, the antibiofilm effect of (+)-Medioresinol alone or in combination with each antibiotic was investigated. The results indicated that not only (+)-Medioresinol but also its combination with each antibiotic had antibiofilm activities. It concludes that (+)-Medioresinol has potential as a therapeutic agent and adjuvant for treatment of bacterial infection.

[Solvent]

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

[HPLC Method]

Mobile phase: Methanol-H₂O gradient elution;

Flow rate: 1.0 ml/min;

The wave length of determination: 232 nm.

[Storage]

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

[References]

1. Helvetica Chimica Acta, 2013, 96(2), 320-325.
2. Biochimie., 2012, 94(8), 1784-1793.
3. Applied Biochemistry and Biotechnology, 2013, 170(8), 1934-1941.