[ Product Information ]

Name: Dihydroguaiaretic acid
Catalog No.: CFN97133
Cas No.: 66322-34-7
Purity: > 95%
M.F: C_{20}H_{26}O_{4}
M.W: 330.4

Physical Description: Powder

Synonyms: 4-[(2R,3S)-4-(4-Hydroxy-3-methoxyphenyl)-2,3-dimethylbutyl]-2-methoxyphenol; 4,5alpha-Epoxy-3,6-dimethoxy-17-methylmorphinan; meso-dihydroguaiaretic acid.

[ Intended Use ]

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

[ Source ]

The aerial parts of *Saururus chinensis*. 
[**Biological Activity or Inhibitors**]

Meso-dihydroguaiaretic acid inhibits both COX-2 and 5-lipoxygenase, and it inhibits the degranulation reaction in bone marrow-derived mast cells (BMMC) (IC\textsubscript{50}=11.4\textmu M), therefore, meso-dihydroguaiaretic acid may provide a basis for novel anti-inflammatory drug development.\[^{[1]}\]

Meso-dihydroguaiaretic acid and licarin A protect against glutamate-induced toxicity in primary cultures of a rat cortical cells, via antioxidative activities.\[^{[2]}\]

Meso-dihydroguaiaretic acid inhibits activation of hepatic stellate cells (HSCs) and down-regulates TGF-beta1 gene expression through inhibition of AP-1.\[^{[3]}\]

Dihydroguaiaretic acid has larvicidal activity against Culex pipiens.\[^{[4]}\]

Meso-dihydroguaiaretic acid has the potential to attenuate nonalcoholic steatosis mediated by selective inhibition of liver X receptor (LXR)\alpha in the liver in mice.\[^{[5]}\]

Meso-dihydroguaiaretic acid may inhibit proliferation of vascular smooth muscle cells (VSMCs) by suppressing autophosphorylation of platelet-derived growth factor (PDGF)R\beta, and may be useful in the treatment of VSMC-associated vascular disease such as atherosclerosis, restenosis, and neointimal hyperplasia after angioplasty.\[^{[6]}\]

[**Solvent**]

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

[**HPLC Method**]\[^{[7]}\]

Mobile phase: Acetonitrile-Triethyl phosphate=55:45;
Flow rate: 1.0 ml/min;
Column temperature: 40°C;
The wave length of determination: 237 nm.

[**Storage**]
2-8℃, Protected from air and light, refrigerate or freeze.

[ References ]


[ Contact ]

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