[Product Information]

Name: Stigmasterol
Catalog No.: CFN97326
Cas No.: 83-48-7
Purity: > 98%
M.F: C_{29}H_{48}O
M.W: 412.7

Physical Description: Cryst.

Synonyms: (3S,8S,9S,10R,13R,14S,17R)-17-[(E,2R,5S)-5-ethyl-6-methylhept-3-en-2-yl]-10,13-dimethyl-2,3,4,7,8,9,11,12,14,15,16,17-dodecahydro-1H-cyclopenta[a]phenanthren-3-ol.

[Intended Use]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Cosmetic research;
5. Synthetic precursor compounds;
6. Intermediates & Fine Chemicals;
7. Ingredient in supplements;
8. Others.
[Source]
The herb of *Delphinium grandiflorum* L.

[Biological Activity or Inhibitors]
Stigmasterol, isolated from the bark of *Butea monosperma*, has thyroid inhibitory, antiperoxidative and hypoglycemic effects; the synergism of β-sitosterol and stigmasterol to produce hypoglycaemic activity and their occurrence in Parkia speciosa Hassk.[1,2]

Stigmasterol, a soy lipid-derived phytosterol, is an antagonist of the bile acid nuclear receptor FXR.[3]

Stigmasterol has anti-inflammatory effect, it inhibits several pro-inflammatory and matrix degradation mediators typically involved in osteoarthritis (OA)-induced cartilage degradation, at least in part through the inhibition of the NF-kappaB pathway.[4]

Stigmasterol has cholesterol-lowering activity, when fed, lowers plasma cholesterol levels, inhibits intestinal cholesterol and plant sterol absorption, and suppresses hepatic cholesterol and classic bile acid synthesis in Wistar as well as wild-type Kyoto (WKY) rats.[5]

Stigmasterol can inhibit tumour promotion in mouse skin two-stage carcinogenesis.[6]

Stigmasterol has ameliorating effects on scopolamine-induced memory impairments in mice, stigmasterol-induced cognitive ameliorative effects are mediated by the enhancement of cholinergic neurotransmission system via the activation of estrogen or NMDA receptors.[7]

[Solvent]
Chloroform, Dichloromethane, Diethyl ether, DMSO, Acetone, etc.

[HPLC Method][8]
Mobile phase: Methanol -H2O=99:1 ;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 202 nm.

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

[ References ]

[ Contact ]
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