[Product Information]

Name: Auraptene
Catalog No.: CFN98787
Cas No.: 495-02-3
Purity: > 95%
M.F: C_{19}H_{22}O_{3}
M.W: 298.4
Physical Description: Powder
Synonyms: 7-[[3(E)-3,7-Dimethyl-2,6-octadienyl]oxy]-2H-1-benzopyran-2-one; Aurapten.

[Intended Use]

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

[Source]

The peel of Poncirus trifoliata.

[Biological Activity or Inhibitors]
Dietary auraptene, a citrus antioxidant, is effective in inhibiting the development of esophageal tumors by N\-nitrosomethylbenzylamine (NMBA) when given during the initiation as well as post-initiation phases, and such inhibition is related to suppression of cell proliferation in the esophageal epithelium.\[1\]

Auraptene can inhibit 12-0-Tetradecanoylphorbol-13-acetate-induced tumor promotion in ICR mouse skin, possibly through suppression of superoxide generation in Leukocytes, indicates that it is a chemopreventer of skin tumorigenesis, and implies that suppression of leukocyte activation might be the mechanism through which it inhibits tumor promotion.\[2\]

Citrus auraptene and nobiletin have protective effects in transgenic rats developing adenocarcinoma of the prostate (TRAP) and human prostate carcinoma cells. \[3\]

Auraptene has immunomodulatory action on macrophage functions and cytokine production of lymphocytes in female BALB/c mice.\[4\]

Auraptene acts as a peroxisome proliferator-activated receptor-alpha (PPARalpha) agonist in hepatocytes and that auraptene may improve lipid abnormality through PPARalpha activation in the liver.\[5\]

Auraptene can effectively inhibit microglia activation, cyclooxygenase-2 expression by astrocytes, and neuronal cell death in the hippocampus following ischemic insults, suggests that auraptene acts as a neuroprotective agent in the ischemic brain, which may be mediated by suppression of the inflammatory response.\[6\]

[ **Solvent** ]

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

[ **HPLC Method** ]\[7\]

Mobile phase: 0.1% Formic acid in water- Acetonitrile= 84.5:15.5;
Flow rate: 1.0 ml/min;
Column temperature: Room Temperature;
The wave length of determination: 322 nm.
[ Storage ]

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

[ References ]


[ Contact ]

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