

Catalog # 10-2593

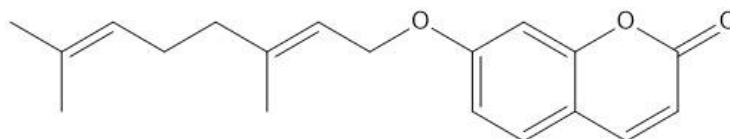
Auraptene

CAS# 495-02-3

7-[[[(2E)-3,7-dimethyl-2,6-octadien-1-yl]oxy]-2H-1-benzopyran-2-one

7-Geranyloxycoumarin

Lot # X109757



A bioactive terpenoid occurring in a variety of citrus fruits and possessing therapeutic potential.¹ Displays neurotogenic activity² and neuroprotective effects via suppression of inflammation and induction of GDNF and BDNF in neuronal cells³. Attenuates ROS production and enhances mitochondrial respiration which mitigates Parkinson's disease-like behavior.⁴ Displays hepatoprotective⁵ and chemopreventive activity⁶.

- 1) Bibak *et al.* (2019), *A Review of the Pharmacological and Therapeutic Effects of Auraptene*; *Biofactors*, **45** 867
- 2) Furukawa *et al.* (2012), *Neurotrophic Effects of Citrus Auraptene: Neurotogenic Activity in PC12 Cells*; *Int. J. Mol. Sci.*, **13** 5338
- 3) Furukawa *et al.* (2020), *Citrus Auraptene Induces Expression of Brain-Derived Neurotrophic Factor in Neuro2a Cells*; *Molecules*, **25** 1117
- 4) Jang *et al.* (2019), *Auraptene Mitigates Parkinson's Disease-Like Behavior by Protecting Inhibition of Mitochondrial Respiration and Scavenging Reactive Oxygen Species*; *Int. J. Mol. Sci.*, **20** 3409
- 5) Wang *et al.* (2019), *Hepatoprotection of Auraptene From the Peels of Citrus Fruits Against 17 α -ethinylestradiol-induced Cholestasis in Mice by Activating Farnesoid X Receptor*; *Food Funct.*, **10** 3839
- 6) Tanaka *et al.* (1998), *Citrus Auraptene Exerts Dose-Dependent Chemopreventative Activity in Rat Large Bowel Tumorigenesis: The Inhibition Correlates With Suppression of Cell Proliferation and Lipid Peroxidation and With Induction of Phase II Drug-Metabolizing Enzymes*; *Cancer Res.*, **58** 2550

PHYSICAL DATA

Molecular Weight:	298.36
Molecular Formula:	C ₁₉ H ₂₂ O ₃
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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