NEUROMICS

Auraptene Data Sheet

Catalog Number:	MC11004	**Product Type:**	Small Molecule
Bio-Activity:	Neuroprotective/Neuritogenic agent	**CAS #:**	495-02-3
Research Categories:	Neuroscience, cell death, oxidative stress, stem cells	**Chemical Name:**	7-[[(2E)-3,7-dimethyl-2,6-octadien-1-yl]oxy]-2H-1-benzopyran-2-one
Solubility:	Soluble in DMSO (up to 40 mg/ml)	**Molecular Formula:**	C19H22O3
Purity:	> 98%	**Molecular Weight:**	298.36
Format:	Powder	**Ship Temp:**	Ambient
Storage:	-20°C		

Application Notes

Description/Data:
Auraptene is a bioactive terpenoid found in many citrus fruits that has been noted as a potential therapeutic (1). It has been shown to display neuritogenic activity (2) and neuroprotective effects through a suppression of inflammation and induction of GDNF and BDNF in neurons (3). Auraptene also inhibits ROS production and boosts mitochondrial respiration which decreases Parkinson's disease-like symptoms (4). Lastly, it has also been known for hepatoprotective (5) and chemo preventive activity (6).

References:

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: Neuritogenic 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

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5) Wang et al. (2019), Hepatoprotection of Auraptene From the Peels of Citrus Fruits Against 17α-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

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