

Catalog # 10-4763 Nobiletin CAS# 478-01-3

3',4',5,6,7,8-Hexamethoxyflavone Lot # FBA4020

Nobiletin is a natural product isolated from citrus peels. It has recently been shown to possess circadian clock amplitude-enhancing properties and was able to prevent metabolic syndrome in mice *via* a *Clock* gene-dependent mechanism. Nobiletin directly bound to and activated ROR_{α}/γ . Nobiletin has previously been shown to attenuate the effects of metabolic syndrome², have anti-neuroinflammatory effects³, possess neurotrophic activity⁴, and be a cancer chemopreventative agent⁵.

- 1) He et al. (2016), The Small Molecule Nobiletin Targets the Molecular Oscillator to Enhance Circadian Rhythms and Protect against Metabolic Syndrome; Cell Metabolism, **23** 610
- 2) Mulvihill et al. (2011), Nobiletin attenuates VLDL overproduction, dyslipidemia, and atherosclerosis in mice with diet-induced insulin resistance; Diabetes **60** 1446
- 3) Cui et al. (2010), Anti-neuroinflammatory activity of nobiletin on suppression of microglial activation; Biol.Pharm.Bull., **33** 1814
- 4) Nagase et al. (2005), Mechanism of neurotrophic action of nobiletin in PC12D cells; Biochemistry 44 13683
- 5) Walle (2007), Methoxylated flavones, a superior cancer chemopreventative flavonoid subclass?; Semin.Cancer Biol. 17 354

PHYSICAL DATA

Molecular Weight: 402.39 Molecular Formula: $C_{21}H_{22}O_8$ Purity: 99% by HPLC

NMR: (Conforms)

Solubility: DMSO (10 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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