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## **Product Information**

Product ID T0253 CAS No. 481-53-8

**Chemical Name** 

Synonym Tangeritin, 4',5,6,7,8-Pentamethoxyflavone

Formula C<sub>20</sub>H<sub>20</sub>O<sub>7</sub> Formula Wt. 372.37 **Melting Point** 

Purity ≥98%

Solubility Soluble in methanol or ethyl

acetate; insoluble in water

O О

Bulk quanitites available upon request

Product ID Size T0253 5 mg T0253 10 mg

Store Temp Ambient Ship Temp Ambient

**Description** Tangeretin is a polymethoxy flavonoid found in citrus fruits. This compound exhibits a wide variety of health-related benefits, including anti-inflammatory, anti-allergic, anti-diabetic, anti-osteoporotic, and anticancer activities. In an in vivo model of skin-based allergic reaction, administration of tangeretin inhibits expression of IL-4 and TNF- $\alpha$  as well as inhibiting activation of NF-kB, AP-1, and p38. In both in vitro and in vivo models of diabetes mellitus, tangeretin increases AMPK phosphorylation and glucose uptake and alters secretion of adipocytokines such as leptin, adiponectin, resistin, IL-6, and MCP-1. Additionally, this compound induces cell cycle arrest and inhibited proliferation of breast cancer and colon cancer cells. Tangeretin also inhibits osteoclast formation, suggesting potential benefit as a treatment for bone diseases.

References Jang SE, Ryu KR, Park SH, et al. Nobiletin and tangeretin ameliorate scratching behavior in mice by inhibiting the action of histamine and the activation of NF-κB, AP-1 and p38. Int Immunopharmacol. 2013 Aug 9;17(3):502-507. PMID: 23938254.

> Tominari T, Hirata M, Matsumoto C, et al. Polymethoxy flavonoids, nobiletin and tangeretin, prevent lipopolysaccharideinduced inflammatory bone loss in an experimental model for periodontitis. J Pharmacol Sci. 2012;119(4):390-4. PMID: 22850615.

Kim MS, Hur HJ, Kwon DY, et al. Tangeretin stimulates glucose uptake via regulation of AMPK signaling pathways in C2C12 myotubes and improves glucose tolerance in high-fat diet-induced obese mice. Mol Cell Endocrinol. 2012 Jul 6;358(1):127-34. PMID: 22476082.

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Caution: This product is intended for laboratory and research use only. It is not for human or drug use.