



LKT Laboratories, Inc.

Naringin

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Product Information

Product ID N0069

CAS No. 10236-47-2

Chemical Name 7-[[2-O-(6-Deoxy- α -L-mannopyranosyl)- β -D-glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one

Synonym Naringenin-7-rhamnoglucoside, Aurantiin

Formula $C_{27}H_{32}O_{14}$

Formula Wt. 580.53

Melting Point 175-180°C

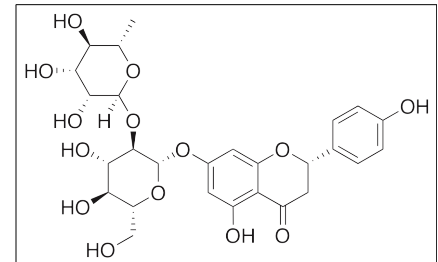
Purity $\geq 97\%$

Solubility Soluble in water (1 mg/ml), alcohol, acetone, and warm acetic acid

Store Temp Ambient

Ship Temp Ambient

Description Naringin is a phytoestrogen and flavanone glycoside originally found in citrus fruits that exhibits anti-angiogenic, anticancer chemotherapeutic, antioxidative, neuroprotective, cognition enhancing, nephroprotective, and anti-inflammatory activities. Naringin inhibits release of VEGF in ER+ breast cancer cells; in similar cancer models, naringin increases expression of p21 and decreases expression of survivin and β -catenin, suppressing cell and tumor growth. This compound binds estrogen receptors, acting as a selective estrogen receptor modulator (SERM) in a concentration-dependent manner. Naringin also improves colchicine-induced deficits in cognitive performance and attenuates oxidative damage by decreasing levels of malondialdehyde and nitrates and increasing activity of superoxide dismutase, catalase, and glutathione-S-transferase. Naringin also improves cognitive function and CaMKII activity in animal models of Alzheimer's disease. Additionally, this compound inhibits gentamicin-induced increases in TNF- α , IL-6, and NF- κ B and suppresses levels of Bax, caspase 3, and p53.



Bulk quantities available upon request

| Product ID | Size | List Price |
|------------|-------|------------|
| N0069 | 1 g | |
| N0069 | 25 g | |
| N0069 | 100 g | |

References Sahu BD, Tatireddy S, Koneru M, et al. Naringin ameliorates gentamicin-induced nephrotoxicity and associated mitochondrial dysfunction, apoptosis and inflammation in rats: possible mechanism of nephroprotection. *Toxicol Appl Pharmacol.* 2014 May 15;277(1):8-20. PMID: 24637089.

Li H, Yang B, Huang J, et al. Naringin inhibits growth potential of human triple-negative breast cancer cells by targeting β -catenin signaling pathway. *Toxicol Lett.* 2013 Jul 18;220(3):219-28. PMID: 23694763.

Wang DM, Yang YJ, Zhang L, et al. Naringin Enhances CaMKII Activity and Improves Long-Term Memory in a Mouse Model of Alzheimer's Disease. *Int J Mol Sci.* 2013 Mar 11;14(3):5576-86. PMID: 23478434.

Guo D, Wang J, Wang X, et al. Double directional adjusting estrogenic effect of naringin from *Rhizoma drynariae* (Gusuibu). *J Ethnopharmacol.* 2011 Nov 18;138(2):451-7. PMID: 21964193.

Kumar A, Dogra S, Prakash A. Protective effect of naringin, a citrus flavonoid, against colchicine-induced cognitive dysfunction and oxidative damage in rats. *J Med Food.* 2010 Aug;13(4):976-84. PMID: 20673063.

Schindler R, Mentlein R. Flavonoids and vitamin E reduce the release of the angiogenic peptide vascular endothelial growth factor from human tumor cells. *J Nutr.* 2006 Jun;136(6):1477-82. PMID: 16702307.

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