



LKT Laboratories, Inc.

## Naringenin

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### Product Information

**Product ID** N0068

**CAS No.** 67604-48-2

**Chemical Name** 2,3-Dihydro-5,7-dihydroxy-2-(4-hydroxyphenyl)4H-1-benzopyran-4-one

**Synonym** 4',5,7-Trihydroxyflavanone, naringetol, salipurpol, pelargidanon 1602

**Formula** C<sub>15</sub>H<sub>12</sub>O<sub>5</sub>

**Formula Wt.** 272.25

**Melting Point** 247-250 °C

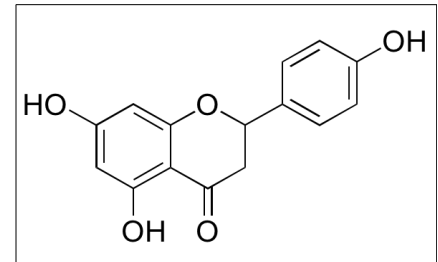
**Purity** ≥98%

**Solubility** Insoluble in water. Soluble in ethanol (50 mg/mL), DMSO, methanol.

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Naringenin is a phytoestrogen and flavanone found in citrus fruits. Naringenin exhibits antioxidative, anti-inflammatory, hepatoprotective, neuroprotective, immunomodulatory, anti-metastatic, anti-asthma, anti-allergic, anti-fibrotic, anti-metastatic, antiviral, antidepressant, anticancer, and gastrointestinal motility modulating activities. Naringenin inhibits oxidative damage in animal models of Alzheimer's disease and protects against 6-OHDA-induced neurodegeneration by increasing levels of Nrf2 in animal models of Parkinson's disease. In animal models of CCl<sub>4</sub>-induced liver injury, naringenin inhibits lipid peroxidation, increases levels of glutathione, HO-1, and Nrf2, and decreases levels of TNF-α, COX-2, and iNOS. In macrophages, naringenin alters expression of toll-like receptors 2 and 4 (TLR2, TLR4) and CD86; it also inhibits Treg-induced suppression and limits metastasis in animal models. In other animal models, naringenin inhibits allergen-induced airway inflammation. Naringenin also decreases levels of α-SMA, collagen type I, fibronectin, and ERK1/2 in fibroblasts. In leukemia cells, naringenin induces apoptosis, decreases the mitochondrial membrane potential and levels of Bcl-2, and increases levels of Bax. This compound also shows benefit in the tail suspension test and inhibits hepatitis C viral assembly.



**Bulk quantities available upon request**

Product ID	Size
N0068	5 g
N0068	10 g
N0068	25 g

**References** Esmaeili MA, Alilou M. Naringenin attenuates CCl<sub>4</sub>-induced hepatic inflammation by the activation of an Nrf2-mediated pathway in rats. *Clin Exp Pharmacol Physiol.* 2014 Jun;41(6):416-22. PMID: 24684352.

Chetourou Y, Fetoui H, Gdoura R. Protective effects of naringenin on iron-overload-induced cerebral cortex neurotoxicity correlated with oxidative stress. *Biol Trace Elem Res.* 2014 Jun;158(3):376-83. PMID: 24682942.

Lou H, Jing X, Wei X, et al. Naringenin protects against 6-OHDA-induced neurotoxicity via activation of the Nrf2/ARE signaling pathway. *Neuropharmacology.* 2014 Apr;79:380-8. PMID: 24333330.

Kim S, Park TI. Naringenin: a partial agonist on estrogen receptor in T47D-KBluc breast cancer cells. *Int J Clin Exp Med.* 2013 Oct 25;6(10):890-9. PMID: 24260594.

Yilma AN, Singh SR, Morici L, et al. Flavonoid naringenin: a potential immunomodulator for Chlamydia trachomatis inflammation. *Mediators Inflamm.* 2013;2013:102457. PMID: 23766556.

Jang Y, Kim SW, Oh J, et al. Ghrelin receptor is activated by naringin and naringenin, constituents of a prokinetic agent *Poncirus fructus*. *J Ethnopharmacol.* 2013 Jul 9;148(2):459-65. PMID: 23639361.

Jung JW, Park IH, Cho JS, et al. Naringenin inhibits extracellular matrix production via extracellular signal-regulated kinase pathways in nasal polyp-derived fibroblasts. *Phytother Res.* 2013 Mar;27(3):463-7. PMID: 22674629.

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