LKT Laboratories, Inc.

Luteolin

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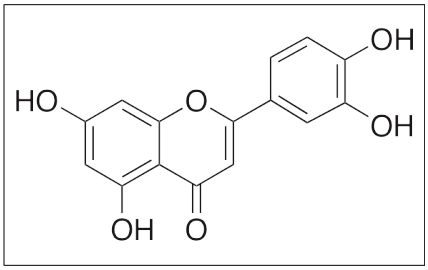
Product Information

Product ID L8377
CAS No. 491-70-3
Chemical Name 2-(3,4-Dihydroxyphenyl)-5,7-dihydroxy-4H-1- benzopyran-4-one
Synonym 3',4',5,7-Tetrahydroxyflavone, Digitoflavone, Cyanidenon



Formula $C_{15}H_{10}O_6$
Formula Wt. 286.24
Melting Point ~330°C (lit.)
Purity ≥95%
Solubility Soluble in methanol and alkaline solutions. Slightly soluble in water. DMSO to 57 mg/mL, Ethanol to 6mg/mL
Store Temp 4°C
Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
L8377	100 mg
L8377	500 mg
L8377	1 g

Description Luteolin is a flavonoid found in various plant sources. Luteolin exhibits antioxidative, anti-inflammatory, neuromodulatory, anti-diabetic, antihypertensive, and anticancer chemotherapeutic activities. In vitro and in vivo, luteolin inhibits LPS-induced expression of IL-6 by inhibiting JNK phosphorylation and decreasing the binding of AP-1 transcription factor to the IL-6 promoter. In animal models of experimental autoimmune encephalitis (EAE), luteolin inhibits mast cell activity and mast cell-dependent T cell activation, lessening disease pathology. Luteolin inhibits phosphodiesterases (PDE 1-5) and may also inhibit α2-adrenergic receptors as it reverses xylazine/ketamine-induced anesthesia in vivo. Luteolin also increases monoamine transport, potentially through potentiation of DAT and NET. In diabetic mice, luteolin decreases mast cell and macrophage infiltration, expression of inflammatory cytokines, glucose tolerance, insulin sensitivity, and apoptosis. Luteolin decreases systolic blood pressure in spontaneously hypertensive rats and decreases expression of MMP9 and VEGF, suppressing tumor growth in animal models with gastric cancer xenografts. Additionally, luteolin inhibits heat shock protein 90 (HSP90) and IGF -1R.

References

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