



LKT Laboratories, Inc.

Hesperetin

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Product Information

Product ID H1672

CAS No. 520-33-2

Chemical Name (2S)-2,3-Dihydro-5,7-dihydroxy-2-(3-hydroxy-4-methoxyphenyl)-4H-1-benzopyran-4-one

Synonym 3',5,7-trihydroxy-4'-methoxyflavanone, Cyanidanon 4'-methyl ether 1626

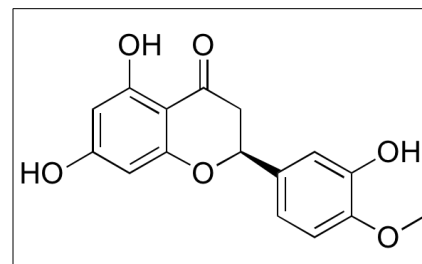
Formula C₁₆H₁₄O₆

Formula Wt. 302.28

Melting Point 226-228 °C

Purity ≥97%

Solubility Soluble in ethanol. Slightly soluble in water.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
H1672	1 g	\$37.80
H1672	5 g	\$122.70
H1672	10 g	\$157.80

Store Temp -20 °C

Ship Temp Ambient

Description Hesperetin is a phytoestrogen and flavanone found in citrus plants that exhibits analgesic, antinociceptive, anti-inflammatory, antioxidative, cardioprotective, anti-fibrotic, anticancer, and anti-metastatic activities. Hesperetin inhibits mechanical and thermal hyperalgesia and allodynia and decreases production of IL-6, IL-1β, and TNF-α in animal models. In vitro, hesperetin decreases Ca²⁺ influx by inhibiting L-type Ca²⁺ channels, inducing vasorelaxation. Additionally, hesperetin increases expression of catalase, glutathione, superoxide dismutase, and glutathione peroxidase and decreases expression of lipid peroxidase in vivo. In other animal models, this compound prevents cardiac hypertrophy, cardiac dysfunction, and fibrosis. Hesperetin also activates Notch1 signaling, induces differentiation, and inhibits cell migration and invasion in anaplastic thyroid cancer cells. In breast cancer cells, this compound decreases the mitochondrial membrane potential and increases cytochrome c release, caspase 7 activation, and PARP cleavage, inducing apoptosis.

References Palit S, Kar S, Sharma G, et al. Hesperetin induces apoptosis in breast carcinoma by triggering accumulation of ROS and activation of ASK1/JNK pathway. *J Cell Physiol.* 2014 Sep 10. [Epub ahead of print]. PMID: 25204891.

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