



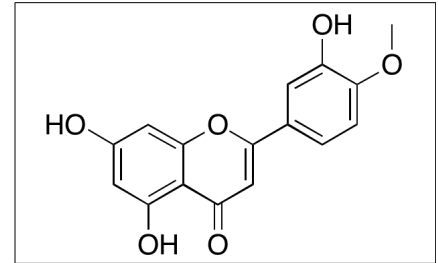
LKT Laboratories, Inc.

Diosmetin

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## Product Information

**Product ID** D3356  
**CAS No.** 520-34-3  
**Chemical Name**  
benzopyran-4-one  
**Synonym** Cyanidenon-4'-methyl ether 1479, Luteolin-4'-methyl ether



**Formula** C<sub>16</sub>H<sub>12</sub>O<sub>6</sub>  
**Formula Wt.** 300.26  
**Melting Point** 257-259 °C  
**Purity** ≥98%  
**Solubility** Sparingly soluble in water (<1 mg/ml). Soluble in acetonitrile, DMSO (60 mg/ml), and ethanol (17 mg/ml).

## Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
D3356	250 mg	\$102.20
D3356	1 g	\$273.50
D3356	5 g	\$674.10
D3356	25 g	\$2107.00

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Diosmetin is an *O*-methylated flavone found in vetch and various citrus fruits; it exhibits antioxidative, anti-inflammatory, anticancer, and anti-osteoporotic activities. In animal models of AAPH-induced oxidative stress, diosmetin decreases generation of ROS and increases levels of superoxide dismutase, catalase, and glutathione peroxidase. Diosmetin also decreases amylase, lipase, TNF- $\alpha$ , IL-1 $\beta$ , IL-6, and iNOS in animal models of pancreatitis. In breast cancer cells, diosmetin induces G1 phase cell cycle arrest and inhibits cellular proliferation. Additionally, this compound increases activation of PKC, ERK1/2, and p38 MAPK, inducing osteoblastic differentiation in vitro.

**References** Liao W, Ning Z, Chen L, et al. Intracellular Antioxidant Detoxifying Effects of Diosmetin on 2,2-Azobis(2-amidinopropane) Dihydrochloride (AAPH)-Induced Oxidative Stress through Inhibition of Reactive Oxygen Species Generation. *J Agric Food Chem.* 2014 Aug 27;62(34):8648-54. PMID: 25075433.

Yu G, Wan R, Yin G, et al. Diosmetin ameliorates the severity of cerulein-induced acute pancreatitis in mice by inhibiting the activation of the nuclear factor- $\kappa$ B. *Int J Clin Exp Pathol.* 2014 Apr 15;7(5):2133-42. PMID: 24966921.

Androutsopoulos VP, Mahale S, Arroo RR, et al. Anticancer effects of the flavonoid diosmetin on cell cycle progression and proliferation of MDA-MB 468 breast cancer cells due to CYP1 activation. *Oncol Rep.* 2009 Jun;21(6):1525-8. PMID: 19424633.

Hsu YL, Kuo PL. Diosmetin induces human osteoblastic differentiation through the protein kinase C/p38 and extracellular signal-regulated kinase 1/2 pathway. *J Bone Miner Res.* 2008 Jun;23(6):949-60. PMID: 18269307.

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