



## Product Information

Product ID I7759

CAS No. 70872-29-6

Chemical Name 7-hydroxy-2-(4-hydroxyphenyl)-5-methoxy-8-(3-methylbut-2-enyl)-2,3-dihydrochromen-4-one

Synonym

Formula  $C_{21}H_{22}O_5$

Formula Wt. 354.39

Melting Point

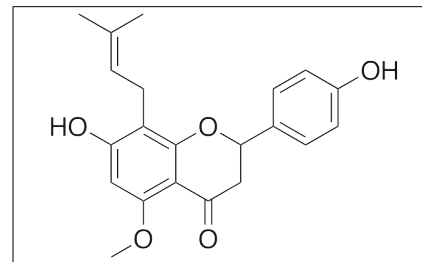
Purity  $\geq 98\%$

Solubility Soluble in DMSO (50mg/ml)  
or methanol (50mg/ml).

Store Temp 4°C

Ship Temp ambient

**Description** Isoxanthohumol (IX) is a prenylflavonoid and derivative of xanthohumol found in *Humulus lupulus*. IX, similar to xanthohumol, exhibits anti-inflammatory, anti-angiogenic, and pro-apoptotic activities, although at a lesser potency than xanthohumol. IX modulates signaling between endothelial cells and vascular smooth muscle cells in a variety of cell lines, decreasing levels of TNF- $\alpha$ , NF- $\kappa$ B, VEGF-R2, and angiopoietins 1 and 2. In mature adipocytes, IX increases ROS and induces apoptosis; in preadipocytes, this compound inhibits differentiation and also induces apoptosis as exhibited by increases in cytochrome c and PARP and decreases in PPAR $\gamma$ , adipocyte protein 2, and CEBP2 upon stimulation with IX. IX undergoes transformation in vitro and in the intestine to form 8-prenylnaringenin, a potent phytoestrogen.



## Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
I7759	1 mg	\$90.00
I7759	5 mg	\$412.00
I7759	10 mg	\$674.20

**References** Negrão R, Duarte D, Costa R, et al. Isoxanthohumol modulates angiogenesis and inflammation via vascular endothelial growth factor receptor, tumor necrosis factor alpha and nuclear factor kappa B pathways. *Biofactors*. 2013 Aug 1. [Epub ahead of print] PMID: 23904052.

Negrão R, Costa R, Duarte D, et al. Angiogenesis and inflammation signaling are targets of beer polyphenols on vascular cells. *J Cell Biochem*. 2010 Dec 1;111(5):1270-9. PMID: 20803553.

Possemiers S, Rabot S, Espin JC, et al. Eubacterium limosum activates isoxanthohumol from hops (*Humulus lupulus* L.) into the potent phytoestrogen 8-prenylnaringenin in vitro and in rat intestine. *J Nutr*. 2008 Jul;138(7):1310-6. PMID: 18567753.

Yang JY, Della-Fera MA, Rayalam S, et al. Effect of xanthohumol and isoxanthohumol on 3T3-L1 cell apoptosis and adipogenesis. *Apoptosis*. 2007 Nov;12(11):1953-63. PMID: 17874298.

Possemiers S, Bolca S, Grootaert C, et al. The prenylflavonoid isoxanthohumol from hops (*Humulus lupulus* L.) is activated into the potent phytoestrogen 8-prenylnaringenin in vitro and in the human intestine. *J Nutr*. 2006 Jul;136(7):1862-7. PMID: 16772450.

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