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Product Information

Product ID X0254 CAS No. 6754-58-1

Chemical Name (E)-1-[2,4-dihydroxy-6-methoxy-3-(3-methylbut-2-enyl)phenyl]-3-(4-

hydroxyphenyl)prop-2-en-1-one

Synonym

Formula C₂₁H₂₂O₅ Formula Wt. 354.40

Melting Point

Purity ≥98%

Solubility The solubility of xanthohumol in

ethanol and DMF is approximately 3 mg/ml and approximately 2.5 mg/ml in

DMSO. Xanthohumol is

Store Temp 4°C Ship Temp ambient

HO ОН ОН

Bulk quanitites available upon request

Product ID Size X0254 5 mg X0254 10 mg X0254 25 mg

Description Xanthohumol (XN) is a prenylated flavonoid found in *Humulus lupulus* that exhibits anti-osteoporotic, anticancer, antiinflammatory, atheroprotective, neuroprotective, and estrogenic activities. XN alters NF-kB signaling, decreases expression of pro-inflammatory cytokines IL-1-B and MCP-1, and activated AMP-activated protein kinase. In a rodent model of cerebral ischemia, XN attenuates focal cerebral ischemia and improved neurobehavioral deficits by inhibiting ischemia-related increases in TNF-a, HIF-1a, iNOS, and free radical formation. XN also inhibits differentiation of preadipocytes and increases apoptosis in mature adipocytes, potentially playing a role in lipid metabolism. This compound may also play a preventative role against bone diseases, as it inhibits osteoclastogenesis by modulating RANKL signaling. XN also induces apoptosis and indirectly suppresses Notch signaling in hepatocellular carcinoma models.

References Kunnimalaiyaan S, Sokolowski KM, Balamurugan M, et al. Xanthohumol inhibits notch signaling and induces apoptosis in hepatocellular carcinoma. PLoS One. 2015 May 26;10(5):e0127464. PMID: 26011160.

> Suh KS, Rhee SY, Kim YS, et al. Xanthohumol modulates the expression of osteoclast-specific genes during osteoclastogenesis in RAW264.7 cells. Food Chem Toxicol. 2013 Aug 27. [Epub ahead of print] PMID: 23994090.

Doddapattar P, Radović B, Patankar JV, et al. Xanthohumol ameliorates atherosclerotic plaque formation, hypercholesterolemia, and hepatic steatosis in ApoE-deficient mice. Mol Nutr Food Res. 2013 May 3. [Epub ahead of print] PMID: 23650230.

Viola K, Kopf S, Rarova L, et al. Xanthohumol attenuates tumour cell-mediated breaching of the lymphendothelial barrier and prevents intravasation and metastasis. Arch Toxicol. 2013 Jul;87(7):1301-12. PMID: 23503627.

Yen TL, Hsu CK, Lu WJ, et al. Neuroprotective effects of xanthohumol, a prenylated flavonoid from hops (Humulus lupulus), in ischemic stroke of rats. J Agric Food Chem. 2012 Feb 29;60(8):1937-44. PMID: 22300539.

Monteiro R, Calhau C, Silva AO, et al. Xanthohumol inhibits inflammatory factor production and angiogenesis in breast cancer xenografts. J Cell Biochem. 2008 Aug 1;104(5):1699-707. PMID: 18348194.

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