

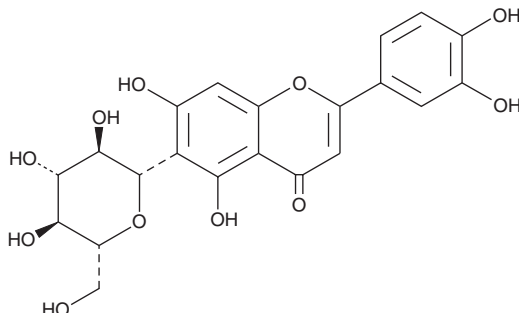
# PRODUCT INFORMATION



## Isoorientin

Item No. 26862

**CAS Registry No.:** 4261-42-1  
**Formal Name:** 2-(3,4-dihydroxyphenyl)-6-β-D-glucopyranosyl-5,7-dihydroxy-4H-1-benzopyran-4-one  
**Synonyms:** Homoorientin, Lespecapitoside, Lutonaretin  
**MF:** C<sub>21</sub>H<sub>20</sub>O<sub>11</sub>  
**FW:** 448.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 213, 259, 272, 353 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Lophatherum gracile*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Isoorientin is supplied as a crystalline solid. A stock solution may be made by dissolving the isoorientin in the solvent of choice, which should be purged with an inert gas. Isoorientin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of isoorientin in these solvents is approximately 25 mg/ml. Isoorientin is also slightly soluble in ethanol.

### Description

Isoorientin is a flavonoid that has been found in *G. olivieri* and has diverse biological activities.<sup>1-3</sup> It induces apoptosis in and reduces cell viability of PATU-8988 and PANC-1 pancreatic cancer cells in a concentration-dependent manner.<sup>1</sup> Isoorientin reduces expression of COX-2, IL-6, 5-lipoxygenase (5-LO), and TNF-α in RAW 264.7 cells.<sup>2</sup> *In vivo*, isoorientin (20 mg/kg) reduces carrageenan-induced paw edema and air pouch blood vessel swelling in mice. It increases stomach levels of superoxide dismutase (SOD) and glutathione (GSH) and reduces ulcer area in a rat model of gastric ulcers induced by indomethacin (Item No. 70270).<sup>3</sup>

### References

1. Ye, T., Su, J., Huang, C., *et al.* Isoorientin induces apoptosis, decreases invasiveness, and downregulates VEGF secretion by activating AMPK signaling in pancreatic cancer cells. *Onco. Targets Ther.* **9**, 7481-7492 (2016).
2. Anilkumar, K., Reddy, G.V., Azad, R., *et al.* Evaluation of anti-inflammatory properties of isoorientin isolated from tubers of *Pueraria tuberosa*. *Oxid. Med. Cell. Longev.* 5498054 (2017).
3. Karaoğlu, E.S., Albayrak, A., Kutlu, Z., *et al.* Gastroprotective and antioxidant effects of *Eremurus spectabilis* Bieb. methanol extract and its isolated component isoorientin on indomethacin induced gastric ulcers in rats. *Acta Cir. Bras.* **33(7)**, 609-618 (2018).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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