

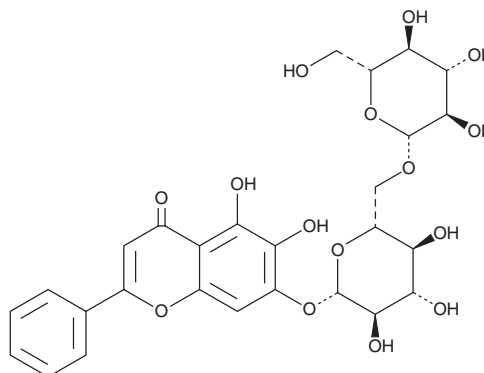
PRODUCT INFORMATION



Oroxin B

Item No. 42489

CAS Registry No.: 114482-86-9
Formal Name: 7-[[6-O-β-D-glucopyranosyl-β-D-glucopyranosyl]oxy]-5,6-dihydroxy-2-phenyl-4H-1-benzopyran-4-one
Synonym: Baicalin-7-O-diglucoside
MF: C₂₇H₃₀O₁₅
FW: 594.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Oroxin B is supplied as a solid. A stock solution may be made by dissolving the oroxin B in the solvent of choice, which should be purged with an inert gas. Oroxin B is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Oroxin B is a flavonoid glucoside that has been found in *O. indicum* that has diverse biological activities.¹⁻⁴ It scavenges DPPH (Item No. 14805) radicals in a cell-free assay (IC₅₀ = 139.62 µg/ml).¹ Oroxin B (20 µM) inhibits the proliferation of Raji lymphoblasts but not isolated human peripheral blood mononuclear cells (PBMCs).² It induces apoptosis, decreases levels of COX-2, VEGF, PI3K, and phosphorylated Akt, and increases levels of phosphatase and tensin homolog (PTEN) in SMMC-7721 hepatocellular cancer cells when used at a concentration of 1.63 µM.³ Oroxin B (30 mg/kg per day) reduces tumor weight and volume and increases survival in a Raji mouse xenograft model.² It decreases plasma levels of triglycerides, total cholesterol, LDL, alanine transaminase (ALT), aspartate aminotransferase (AST), TNF-α, and IL-6 and reduces liver levels of TNF-α and IL-6 in rats fed a high-fat diet when administered at a dose of 200 mg/kg per day.⁴

References

1. Yan, R.Y., Cao, Y.Y., Chen, C.Y., *et al.* Antioxidant flavonoids from the seed of *Oroxylum indicum*. *Fitoterapia* **82**(6), 841-848 (2011).
2. Yang, P., Fu, S., Cao, Z., *et al.* Oroxin B selectively induces tumor-suppressive ER stress and concurrently inhibits tumor-adaptive ER stress in B-lymphoma cells for effective anti-lymphoma therapy. *Toxicol. Appl. Pharmacol.* **288**(2), 269-279 (2015).
3. Li, N.-N., Meng, X.-S., Bao, Y.-R., *et al.* Evidence for the involvement of COX-2/VEGF and PTEN/PI3K/AKT pathway the mechanism of Oroxin B treated liver cancer. *Pharmacogn. Mag.* **14**(54), 207-213 (2018).
4. Huang, Y., Wang, C., Wang, M., *et al.* Oroxin B improves metabolic-associated fatty liver disease by alleviating gut microbiota dysbiosis in a high-fat diet-induced rat model. *Eur. J. Pharmacol.* 951 (2023).

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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