

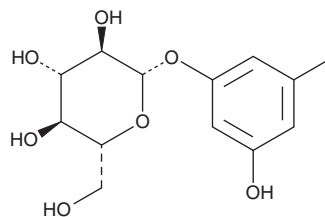
PRODUCT INFORMATION



Orcinol Glucoside

Item No. 42365

CAS Registry No.: 21082-33-7
Formal Name: 3-hydroxy-5-methylphenyl β-D-glucopyranoside
Synonym: Sakakin
MF: C₁₃H₁₈O₇
FW: 286.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Curculigo orchioides* Gaertn.



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

Laboratory Procedures

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

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of orcinol glucoside can be prepared by directly dissolving the solid in aqueous buffers. Orcinol glucoside is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Orcinol glucoside is a phenolic glycoside that has been found in *C. orchioides* and has diverse biological activities.¹⁻⁴ It scavenges hydrogen peroxide- and iron-induced hydroxyl- and superoxide anion radicals in cell-free assays (IC₅₀s = 1.39 and 2.49 mM, respectively).¹ Orcinol glucoside (100 nM) increases proliferation, alkaline phosphatase (Alp) activity, and levels of collagen I and Runx family transcription factor 2 (Runx2) in primary mouse osteoblasts.² It prevents dexamethasone-induced decreases in femur bone mass density and volume in mice when administered at a dose of 20 mg/kg per day. Orcinol glucoside (1.5, 3, or 6 mg/kg) reduces immobility time in the forced swim test and serum levels of corticosterone in a rat model of chronic unpredictable stress-induced depression.³ It increases the number of entries into and time spent in the open arms of the elevated plus maze in mice when administered at doses of 5, 10, or 20 mg/kg.⁴

References

1. Wu, Q., Fu, D.-X., Hou, A.-J., et al. Antioxidative phenols and phenolic glycosides from *Curculigo orchioides*. *Chem. Pharm. Bull. (Tokyo)* **53**(8), 1065-1067 (2005).
2. He, X.-Y.-X., Zhao, W.-L., Yao, L.-P., et al. Orcinol glucoside targeted p38 as an agonist to promote osteogenesis and protect glucocorticoid-induced osteoporosis. *Phytomedicine* **119**, 154953 (2023).
3. Ge, J.-F., Gao, W.-C., Cheng, W.-M., et al. Orcinol glucoside produces antidepressant effects by blocking the behavioural and neuronal deficits caused by chronic stress. *Eur. Neuropsychopharmacol.* **24**(1), 172-180 (2014).
4. Wang, X., Li, G., Li, P., et al. Anxiolytic effects of orcinol glucoside and orcinol monohydrate in mice. *Pharm. Biol.* **53**(6), 876-881 (2015).

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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