

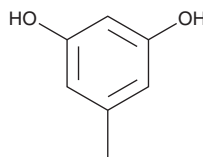
PRODUCT INFORMATION



Orcinol

Item No. 34467

CAS Registry No.: 504-15-4
Formal Name: 5-methyl-1,3-benzenediol
Synonyms: 3,5-Dihydroxytoluene,
5-Methylresorcinol, NSC 12441
MF: $C_7H_8O_2$
FW: 124.1
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Synthetic



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

Laboratory Procedures

Orcinol is supplied as a solid. A stock solution may be made by dissolving the orcinol in the solvent of choice, which should be purged with an inert gas. Orcinol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of orcinol in these solvents is approximately 30 mg/ml.

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 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of orcinol in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Orcinol is a polyketide synthase-derived phenol that has been found in *F. graminearum* and has diverse biological activities.¹⁻³ It scavenges DPPH (Item No. 14805) radicals ($IC_{50} = 2.93$ mM).² Orcinol (2.5 and 5 mg/kg) increases the number of entries into and percentage of time spent in the open arms of the elevated plus maze in mice, indicating anxiolytic-like activity.³ It has also been used in the colorimetric detection of carbohydrates.^{4,5}

References

1. Jørgensen, S.H., Frandsen, R.J.N., Nielsen, K.F., et al. *Fusarium graminearum* PKS14 is involved in orsellinic acid and orcinol synthesis. *Fungal Genet. Biol.* **70**, 24-31 (2014).
2. Lopes, T.I.B., Coelho, R.H., Toshida, N.C., et al. Radical-scavenging activity of orsellinates. *Chem. Pharm. Bull. (Tokyo)* **56(11)**, 1551-1554 (2008).
3. 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).
4. DeGrandis, S., Law, H., Brunton, J., et al. Globotetraosylceramide is recognized by the pig edema disease toxin. *J. Biol. Chem.* **264(21)**, 12520-12525 (1989).
5. Bruckner, J. Estimation of monosaccharides by the orcinol-sulphuric acid reaction. *Biochem. J.* **60(2)**, 200-205 (1955).

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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