

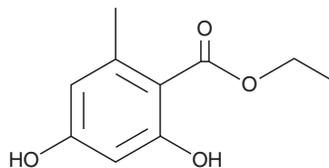
PRODUCT INFORMATION



Ethyl Orsellinate

Item No. 22709

CAS Registry No.: 2524-37-0
Formal Name: 2,4-dihydroxy-6-methyl-benzoic acid,
ethyl ester
Synonym: NSC 149781
MF: C₁₀H₁₂O₄
FW: 196.2
Purity: ≥95%
UV/Vis.: λ_{max}: 217, 265, 302 nm
Supplied as: A crystalline 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

Ethyl orsellinate is supplied as a crystalline solid. A stock solution may be made by dissolving the ethyl orsellinate in the solvent of choice, which should be purged with an inert gas. Ethyl orsellinate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ethyl orsellinate in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

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 ethyl orsellinate can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ethyl orsellinate in PBS, pH 7.2, is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ethyl orsellinate is a lichen metabolite and a derivative of lecanoric acid (Item No. 22710) that has antiproliferative activities.^{1,2} It inhibits the proliferation of human Hep-2 larynx carcinoma, MCF-7 breast cancer, and 786-0 kidney carcinoma cells, as well as B16-F10 murine melanoma and non-cancerous Vero cells (IC₅₀s = 31.2, 70.3, 47.5, 64.8, and 28.1 μg/ml, respectively).² Ethyl orsellinate is toxic to brine shrimp (*A. salina*) with an LC₅₀ value of 495 μM.³

References

1. Guo, J., Li, Z.L., Wang, A.L., *et al.* Three new phenolic compounds from the lichen *Thamnolia vermicularis* and their antiproliferative effects in prostate cancer cells. *Planta. Med.* **77(18)**, 2042-2046 (2011).
2. Bogo, D., Matos, M.F.C., Honda, N.K., *et al.* *In vitro* antitumour activity of orsellinates. *Z. Naturforsch. C.* **65(1-2)**, 43-48 (2010).
3. Gomes, A.T., Honda, N.K., Roese, F.M., *et al.* Cytotoxic activity of orsellinates. *Z. Naturforsch. C.* **61(9-10)**, 653-657 (2006).

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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