PRODUCT INFORMATION



Orsellinic Acid

Item No. 22708

CAS Registry No.: 480-64-8

2,4-dihydroxy-6-methyl-benzoic acid Formal Name: Synonyms: o-Orsellinic Acid, ortho-Orsellinic Acid

MF: $C_8H_8O_4$ FW: 168.2 **Purity:** ≥98%

 λ_{max} : 216, 262, 300 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

Orsellinic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the orsellinic acid in the solvent of choice. Orsellinic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of orsellinic acid in ethanol is approximately 20 mg/ml and approximately 30 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 orsellinic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of orsellinic acid in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Orsellinic acid is a fungal metabolite and benzoic acid derivative with antioxidant and neuroprotective activities. 1,2 It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) radicals with an IC₅₀ value of 5 mM.¹ Orsellinic acid (1 μg/ml) prevents PARP cleavage induced by platelet-activating factor (PAF) in PC12-AC cells and PAF-induced cytotoxicity in PAF receptor null (Pafr/-) mouse cerebellar granule cells.²

References

- 1. 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).
- 2. Ryan, S.D., Harris, C.S., Mo, F., et al. Platelet activating factor-induced neuronal apoptosis is initiated independently of its G-protein coupled PAF receptor and is inhibited by the benzoate orsellinic acid. J. Neurochem. 103(1), 88-97 (2007).

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

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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