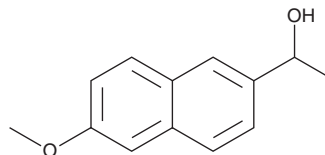


PRODUCT INFORMATION

1-(6-Methoxy-2-naphthyl)ethanol

Item No. 22162

CAS Registry No.: 77301-42-9
Formal Name: 6-methoxy- α -methyl-2-naphthalenemethanol
Synonym: Naproxen Impurity K
MF: C₁₃H₁₄O₂
FW: 202.3
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 231 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

1-(6-Methoxy-2-naphthyl)ethanol is supplied as a crystalline solid. A stock solution may be made by dissolving the 1-(6-methoxy-2-naphthyl)ethanol in the solvent of choice, which should be purged with an inert gas. 1-(6-Methoxy-2-naphthyl)ethanol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 1-(6-methoxy-2-naphthyl)ethanol in these solvents is approximately 30 mg/ml.

1-(6-Methoxy-2-naphthyl)ethanol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1-(6-methoxy-2-naphthyl)ethanol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 1-(6-Methoxy-2-naphthyl)ethanol has a solubility of approximately 0.125 mg/ml in a 1:7 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

1-(6-Methoxy-2-naphthyl)ethanol is a potential impurity in commercial preparations of naproxen.¹ Naproxen (Item No. 70290) is a non-selective COX inhibitor.^{2,3} The IC₅₀ values for human recombinant COX-1 and -2 are 0.6-4.8 μM and 2.0-28.4 μM , respectively.

References

1. Xie, B.-H., Xia, C.-G., Lu, S.-J., *et al.* The first asymmetric carbonylation of 1-(6'-methoxy-2'-naphthyl) ethanol to the methyl ester of (S)-naproxen. *Tetrahedron Lett.* **39**(40), 7365-7368 (1998).
2. Barnett, J., Chow, J., Ives, D., *et al.* Purification, characterization and selective inhibition of human prostaglandin G/H synthase 1 and 2 expressed in the baculovirus system. *Biochim Biophys. Acta.* **1209**(1), 130-139 (1994).
3. Laneuville, O., Breuer, D.K., DeWitt, D.L., *et al.* Differential inhibition of human prostaglandin endoperoxide H synthases-1 and -2 by nonsteroidal anti-inflammatory drugs. *J. Pharmacol. Exp. Ther.* **271**(2), 927-934 (1994).

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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