

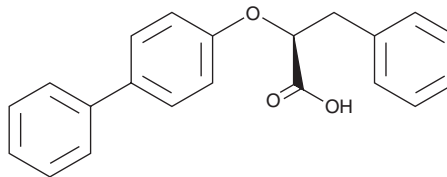
PRODUCT INFORMATION



2-Ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine

Item No. 17645

CAS Registry No.: 133240-06-9
Formal Name: 2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine
MF: C₁₀H₁₃N₃
FW: 175.2
Purity: ≥98%
UV/Vis.: λ_{max}: 244, 286 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

2-Ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine in the solvent of choice. 2-Ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine in these solvents is approximately 10, 20, and 30 mg/ml, respectively.

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. 2-Ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine is sparingly soluble in aqueous buffers. The solubility of 2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine in PBS, pH 7.2, is approximately 0.25 mg/ml. For maximum solubility in aqueous buffers, 2-ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 2-Ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2-Ethyl-5,7-dimethyl-3H-imidazo[4,5-b]pyridine is a nonpeptidic angiotensin II receptor antagonist whose imidazo[4,5-b]pyridine scaffold has been used to examine a variety of positional substitutions in the development of orally active, long duration antihypertensive agents.¹

Reference

1. Mantlo, N.B., Chakravarty, P.K., Ondeyka, D.L., *et al.* Potent, orally active Imadazo[4,5-b]pyridine-based angiotensin II receptor antagonists. *J. Med. Chem.* **34**(9), 2919-2922 (1991).

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.

WARRANTY AND LIMITATION OF REMEDY
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