

PRODUCT INFORMATION



CAY10441

Item No. 10005186

CAS Registry No.: 221529-58-4
Formal Name: 4,5-dihydro-N-[4-[[4-(1-methylethoxy)phenyl]methyl]phenyl]-1H-imadazol-2-amine

Synonym: RO1138452

MF: C₁₉H₂₃N₃O

FW: 309.4

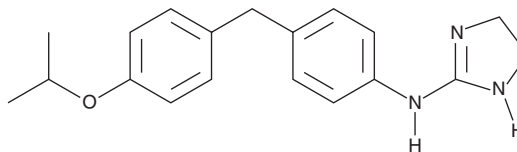
Purity: ≥98%

UV/Vis.: λ_{max}: 232 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

CAY10441 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10441 in an organic solvent purged with an inert gas. CAY10441 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10441 in these solvents is at least 20 mg/ml.

CAY10441 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10441 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10441 has a solubility of 0.05 mg/ml in a 1:10 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Recently, a series of relatively simple compounds were found to be high-affinity ligands and functional antagonists for the human IP (prostacyclin) receptor.¹ CAY10441 is one of the more potent of these. CAY10441 antagonizes the carbaprostacyclin-induced activation of human neuroblastoma adenylate cyclase, blocking cyclic AMP accumulation in a dose-dependent manner. Likewise, it inhibits the binding of tritiated iloprost to rodent neuroblastoma cells with a K_i of about 1.5 nM. At levels between 2-20 mg/kg in rats, CAY10441 shows significant analgesic activity in standard antinociceptive assays.¹

Reference

1. Clark, R.D., Jahangir, A., Severance, D., *et al.* Discovery and SAR development of 2-(phenylamino)imidazolines as prostacyclin receptor antagonists. *Bioorg. Medicinal Chem. Letters* **14**, 1053-1056 (2004).

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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