

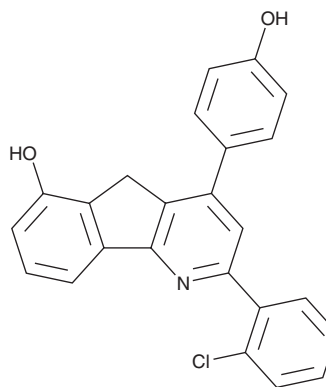
PRODUCT INFORMATION



CAY10744

Item No. 29802

CAS Registry No.: 2375613-31-1
Formal Name: 2-(2-chlorophenyl)-4-(4-hydroxyphenyl)-5H-indeno[1,2-b]pyridin-6-ol
MF: C₂₄H₁₆ClNO₂
FW: 385.8
Purity: ≥98%
UV/Vis.: λ_{max}: 266, 301 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

CAY10744 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10744 in the solvent of choice, which should be purged with an inert gas. CAY10744 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10744 in these solvents is approximately 12, 5, and 20 mg/ml, respectively.

CAY10744 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10744 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10744 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10744 is a topoisomerase II- α poison.¹ It inhibits topoisomerase II- α by 78.9% when used at a concentration of 20 μ M. CAY10744 is selective for topoisomerase II- α over topoisomerase I providing 100 and 0% inhibition, respectively, at 100 μ M. It inhibits proliferation of HCT15 colon, T47D breast, DU145 prostate, and HeLa cervical cancer cells (IC₅₀s = 0.014, 0.00267, 0.072, and 2.46 μ M, respectively). CAY10744 induces apoptosis in T47D cells when used at concentrations of 10 and 30 μ M. CAY10744 (12 mg/kg per day) reduces tumor growth in an MDA-MB-231 orthotopic mouse model of breast cancer.

Reference

1. Kadayat, T.M., Park, S., Shrestha, A., *et al.* Discovery and biological evaluations of halogenated 2,4-diphenyl indeno[1,2-b]pyridinol derivatives as potent topoisomerase II α -targeted chemotherapeutic agents for breast cancer. *J. Med. Chem.* **62(17)**, 8194-8234 (2019).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM