PRODUCT INFORMATION



CAY10677

Item No. 14744

CAS Registry No.: 1443253-20-0

Formal Name: 5-(2-amino-5-pyrimidinyl)-N,N-

diethyl-1-octyl-1H-indole-3-

methanamine

Synonym: Icmt Inhibitor 15

MF: $C_{25}H_{37}N_5$ FW: 407.6 **Purity:** ≥98%

UV/Vis.: λ_{max} : 264 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

CAY10677 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10677 in the solvent of choice, which should be purged with an inert gas. CAY10677 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CAY10677 in these solvents is approximately 20, 25, and 16 mg/ml, respectively.

Description

Post-translational protein prenylation is a 3-step process that occurs at the C-terminus of a number of proteins involved in cell growth control and oncogenesis. Isoprenylcysteine carboxyl methyltransferase (lcmt) catalyzes the methylation of C-terminal prenylcysteine residues, the last step in this process. CAY10677 is an analog of the lcmt inhibitor cysmethynil (Item No. 14745) that was developed for improved solubility and cell permeability. 1 CAY10677 inhibits lcmt with an IC $_{50}$ value of 0.86 μM and demonstrates nearly 10-fold more potent antiproliferative activity than cysmethynil on human breast cancer MDA-MB-231 cells (IC $_{50}$ s = 2.63 versus 27.4 μ M, respectively) and human prostate cancer PC3 cells $(IC_{50}s = 2.55 \text{ versus } 25.2 \mu\text{M}, \text{ respectively}).^{1}$

Reference

1. Ramanujulu, P.M., Yang, T., Yap, S.Q., et al. Functionalized indoleamines as potent, drug-like inhibitors of isoprenylcysteine carboxyl methyltransferase (Icmt). Eur. J. Med. Chem. 63, 378-386 (2013).

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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