

Product Data Sheet

Product Name: Cysmethynil

Cat. No.: GC43354

Chemical Properties

Cas. No. 851636-83-4

SMILES CCCCCCCCN1C2=CC=C(C3=CC(C)=CC=C3)C=C2C(CC(N)=O)=C1

Formula C₂₅H₃₂N₂O M.Wt 376.5

Solubility DMF: 3.3 mg/ml, DMSO: 5 mg/ml, Ethanol: 20 mg/ml
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

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 (Icmt) catalyzes the methylation of C-terminal prenylcysteine residues, the last step in this process. Cysmethynil is an indole-based, time-dependent inhibitor of Icmt (IC₅₀ = adenosylmethionine (K_i = 0.14 μM for the final complex). It does not inhibit other enzymes in the prenylation pathway (farnesyltransferase, geranylgeranyltransferase type I, and Rce1) at

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

concentrations up to 50 μ M, or related methyltransferases. Treatment of cancer cells results in a dose-dependent decrease in Ras carboxylmethylation, mislocalization of Ras, and impaired signaling through Ras pathways. Treatment of PC3 prostate cancer cells with 25 μ M cysmethynil resulted in decreased mTOR signaling, accumulation of cells in the G1 phase, and autophagy-mediated cell death.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA