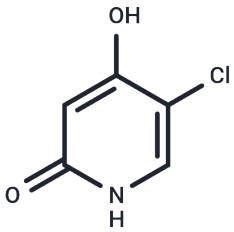
Data Sheet (Cat.No.T0987)

TargetMol

Gimeracil

Chemical Properties



CAS No. : 103766-25-2

Formula: C5H4ClNO2

Molecular Weight: 145.54

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Gimeracil (Gimestat) is a competitive, reversible inhibitor of dihydropyrimidine dehydrogenase.
Targets(IC50)	Others,Autophagy,DNA/RNA Synthesis
Kinase Assay	Microdilution method: The culture media used are RPMI 1640 with glutamine, without bicarbonate and phenol red, buffered with morpholinopropanesulfonic acid (MOPS) (0.165 M, pH 7.0). Two-fold serial dilutions of Flucytosine (0.06-64 μg/mL) are prepared and dispensed in 50 uL aliquot, in flat-bottom 96-well assay plates which are kept frozen at -70 °C in sealed plastic bags until used. The inoculum is prepared spectrophotometrically and standardized to a concentration of 1.0-5.0 × 103 cfu per mL. A 50 μL volume of this suspension is used to inoculate each well containing 50 μL of the double concentration of Flucytosine to be tested. Once inoculated, each well therefore contains 100 μL of broth favoured over 200 μL to facilitate the agitation of the plates prior to spectrophotometric reading. After an incubation period of 24 and 48 hours at 35 °C, the plates are agitated for 3 minutes at 900 r.p.m. with a shaker and the optical density of the growth in each well is determined with the use of an automatic plate reader set at 495 nm. The inhibitory concentration of IC50 is computed mathematically.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 35 mg/mL (240.48 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (13.74 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.871 mL	34.3548 mL	68.7096 mL
5 mM	1.3742 mL	6.871 mL	13.7419 mL
10 mM	0.6871 mL	3.4355 mL	6.871 mL
50 mM	0.1374 mL	0.6871 mL	1.3742 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Prescrire Int. 2013 May;22(138):122.