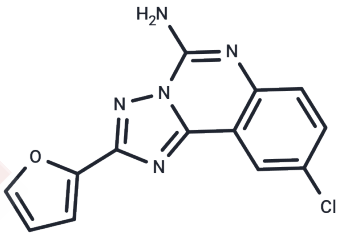
Data Sheet (Cat.No.T14944)

TargetMol

CGS 15943

Chemical Properties



CAS No. : 104615-18-1

Formula: C13H8ClN5O

Molecular Weight: 285.69

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	CGS 15943 is an orally bioavailable non-xanthine antagonist of the Adenosine Receptor. In transfected CHO cells, its Ki values for human A1, A2A, A2B, and A3 Adenosine Receptors are 3.5, 4.2, 16, and 50 nM, respectively.
Targets(IC50)	Adenosine Receptor,PI3K
In vitro	CGS 15943 inhibits the kinase activity of the class IB PI3K isoform p110γ (IC50: 1.1 μM). CGS 15943 shows slight inhibition on p110δ (IC50: 8.47 μM). CGS 15943 (0-20 μM; 24 hours) reduces the phosphorylation of Akt at its residues Ser473 and Thr308 in HLF and Sk-Hep-1 cells. CGS 15943 (0-20 μM; 72 hours) inhibits growth of HLF and SK-Hep-1 cells, as well as HepG2 and PLC-PRF-5 cells[3].

Solubility Information

Solubility	DMSO: 12.22 mg/mL (42.77 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1 mg/mL (3.5 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	3.5003 mL	17.5015 mL	35.003 mL
5 mM	0.7001 mL	3.5003 mL	7.0006 mL
10 mM	0.350 mL	1.7501 mL	3.5003 mL
50 mM	0.070 mL	0.350 mL	0.7001 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

Gao Y, et al. CGS 15943, an adenosine A2 receptor antagonist, reduces cerebral ischemic injury in the Mongolian gerbil. Life Sci. 1994;55(3):PL61-5.
Klotz KN, et al. Adenosine receptors and their ligands. Naunyn Schmiedebergs Arch Pharmacol. 2000 Nov;362(4-5):382-91.
Edling CE, et al. Caffeine and the analog CGS 15943 inhibit cancer cell growth by targeting the phosphoinositide 3-kinase/Akt pathway. Cancer Biol Ther. 2014 May;15(5):524-32.