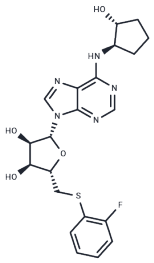
Data Sheet (Cat.No.T27439)

GS-9667

Chemical Properties



CAS No. : 618380-90-8

Formula: C21H24FN5O4S

Molecular Weight: 461.51

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	GS-9667, a selective and partial agonist of the A(1) adenosine receptor (AR), represents an effective therapy for Type 2 diabetes (T2DM) and dyslipidemia via lowering of free fatty acids (FFA).
Targets(IC50)	Adenosine Receptor
In vivo	In the single ascending dose study, healthy, non-obese, and obese subjects received GS-9667 (30-1,800mg; oral; single dose). In the multiple, ascending dose study, healthy, obese subjects received GS-9667 (600-2,400mg QD, 1,200mg BID, or 600mg QID) for 14 days. Doses of GS-9667 ≥300mg caused dose-dependent reductions in FFA levels that were reproducible over 14 days without evidence of desensitization or rebound. All doses were well tolerated. GS-9667 was rapidly absorbed and distributed; Steady-state concentrations were achieved within 3-5 days. The A(1) AR partial agonist GS-9667 reduced plasma FFA, exhibited linear kinetics, and was well-tolerated in healthy non-obese and obese subjects.[1]

Solubility Information

Solubility	DMSO: 55 mg/mL (119.17 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1668 mL	10.834 mL	21.668 mL
5 mM	0.4334 mL	2.1668 mL	4.3336 mL
10 mM	0.2167 mL	1.0834 mL	2.1668 mL
50 mM	0.0433 mL	0.2167 mL	0.4334 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

Staehr PM, et al. Reduction of free fatty acids, safety, and pharmacokinetics of oral GS-9667, an A(1) adenosine receptor partial agonist. J Clin Pharmacol. 2013;53(4):385-392.
Yang M, et al. Adenosine A_1 receptors do not play a major role in the regulation of lipogenic gene expression in hepatocytes. Eur J Pharmacol. 2012;683(1-3):332-339.
Jiang Y, et al. Structural analysis, virtual screening and molecular simulation to identify potential inhibitors targeting 2'-O-ribose methyltransferase of SARS-CoV-2 coronavirus. J Biomol Struct Dyn. 2022;40(3):1331-1346.
Bergman RN, et al. Hypothesis: Role of Reduced Hepatic Insulin Clearance in the Pathogenesis of Type 2 Diabetes [published correction appears in Diabetes. 2019 Dec;68(12):2350]. Diabetes. 2019;68(9):1709-1716.