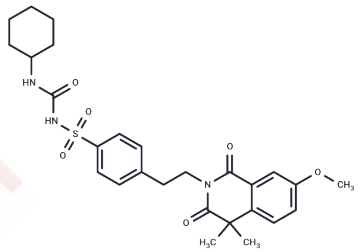
Data Sheet (Cat.No.T0371)

TargetMol

Gliquidone

Chemical Properties



CAS No. : 33342-05-1

Formula: C27H33N3O6S

Molecular Weight: 527.63

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	Gliquidone (AR-DF 26) is a potent, second-generation sulfonylurea with antihyperglycemic activity, exhibiting greater binding affinity to SUR1 and increased potency compared to first-generation compounds. Additionally, this agent exerts peroxisome proliferator-activated receptor (PPAR) gamma agonistic activity.
Targets(IC50)	ERK,Others,NF-κB,STAT,COX,Interleukin,Potassium Channel,ROS
In vitro	Intraventricular administration of 0.06-16 μg Gliquidone to each mouse counteracts the antinociceptive effects of tramadol, morphine, and methadone. A dose of 6 μg Gliquidone intraventricularly administered to each mouse inhibits the antinociceptive responses induced by subcutaneous injections of 0.125 mg/kg clonidine and 0.30 mg/kg chlorthalidone; however, a 3 μg dose is ineffective. In male Swiss albino mice, intraventricular injections of 0.1-1.0 μg Gliquidone dose-dependently suppress the antinociceptive effects of amitriptyline and chlorphenamine. In diabetic rats, a 10 mg/kg dose of Gliquidone significantly reduces blood pressure, diminishes non-enzymatic glycation, lowers total protein levels in the lens, and notably increases glutathione levels in the lens.

Solubility Information

Solubility	DMSO: 250 mg/mL (473.82 mM),Sonication is recommended. Ethanol: 6 mg/mL (11.37 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (6.25 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	1.8953 mL	9.4763 mL	18.9527 mL
5 mM	0.3791 mL	1.8953 mL	3.7905 mL
10 mM	0.1895 mL	0.9476 mL	1.8953 mL
50 mM	0.0379 mL	0.1895 mL	0.3791 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

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Galeotti N, et al. Neuropharmacology, 2001, 40(1), 75-84.
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Ocana M, et al. Br J Pharmacol, 1995, 114(6), 1296-1302.
Galeotti N, et al. Br J Pharmacol, 1999, 126(5), 1214-1220.
Yarat A, et al. Free Radic Biol Med, 2001, 31(9), 1038-1042.
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