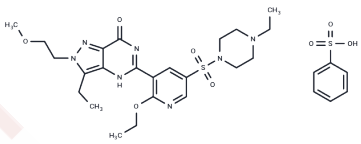
Data Sheet (Cat.No.T11400)

TargetMol

Gisadenafil besylate

Chemical Properties



CAS No. : 334827-98-4

Formula: C29H39N7O8S2

Molecular Weight: 677.79

Storage: Keep away from moisture
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	Gisadenafil besylate (UK 369003-26) is a potent and orally active PDE5 inhibitor (IC50=1.23 nM), 100 times more selective for PDE5 than PDE6, for the study of lower urinary tract symptoms associated with benign prostatic hyperplasia.
Targets(IC50)	PDE
In vivo	In vivo experiments used doxycycline-inducible HIV-1 Tat transgenic mice (GFAP-driven). Gisadenafil besylate was administered intraperitoneally at 0.25 mg/kg daily for 5 days. On day 5, a 5-minute hypercapnia challenge (5% CO_2) was applied to assess cerebrovascular reactivity. The treatment significantly improved the cortical blood flow response in Tat mice from 11.6% to 17.5%, and restored dilation of small arterioles (<25 μm) to 20.6%, though gisadenafil besylate did not recover the dilation of larger vessels [1].

Solubility Information

Solubility	H2O: 1 mg/mL (1.48 mM),Sonication is recommended. DMSO: 80 mg/mL (118.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4754 mL	7.3769 mL	14.7538 mL
5 mM	0.2951 mL	1.4754 mL	2.9508 mL
10 mM	0.1475 mL	0.7377 mL	1.4754 mL
50 mM	0.0295 mL	0.1475 mL	0.2951 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

Silva J, et al. Transient hypercapnia reveals an underlying cerebrovascular pathology in a murine model for HIV-1 associated neuroinflammation: role of NO-cGMP signaling and normalization by inhibition of cyclic nucleotide phosphodiesterase-5. J Neuroinflammation. 2012 Nov 20;9:253.

Rawson DJ, et al. The discovery of UK-369003, a novel PDE5 inhibitor with the potential for oral bioavailability and dose-proportional pharmacokinetics. Bioorg Med Chem. 2012 Jan 1;20(1):498-509.