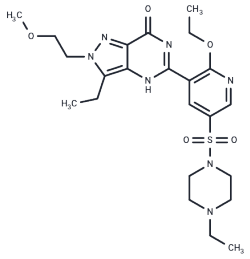
Data Sheet (Cat.No.T15381)

TargetMol

Gisadenafil

Chemical Properties



CAS No. : 334826-98-1

Formula: C23H33N7O5S

Molecular Weight: 519.62

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	Gisadenafil (UK-369003), a selective inhibitor of phosphodiesterase 5 (PDE5) with an IC50 of 3.6 nM, prevents the degradation of cGMP.
Targets(IC50)	PDE
In vitro	In COS-7 cells, the IC50 of Gisadenafil for PDE1A is 9.1 μM, an approximately 2500-fold difference in selectivity[2].
In vivo	In male Tat-transgenic mice, Gisadenafil (2 mg/kg; i.p.) restores the dilation of small (25 μm) arterioles following hypercapnia, although it fails to restore full dilation of larger (>25 μm) vessels. Gisadenafil largely restores the normal increase in cortical flow following hypercapnia in Tat-tg mice (17.5% above baseline)[2].

Solubility Information

Solubility	DMSO: 60 mg/mL (115.47 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9245 mL	9.6224 mL	19.2448 mL
5 mM	0.3849 mL	1.9245 mL	3.849 mL
10 mM	0.1924 mL	0.9622 mL	1.9245 mL
50 mM	0.0385 mL	0.1924 mL	0.3849 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

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.
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.

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