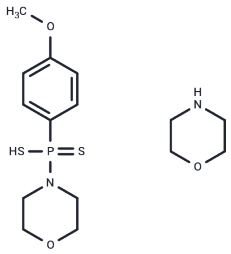
Data Sheet (Cat.No.T22830)

GYY4137

Chemical Properties



CAS No. :	106740-09-4
Formula:	C11H16NO2PS2·C4H9NO
Molecular Weight:	376.47
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	GYY4137 (GYY 4137 morpholine salt) is a novel water-soluble and slow releasing H2S donor with vasodilator and antihypertensive activity. GYY4137 also exhibits anti-inflammatory and anticancer activity.
Targets(IC50)	Apoptosis,Others,NF-κB,NO Synthase,STAT,COX,Interleukin,TNF

Solubility Information

Solubility	DMSO: 250 mg/mL (664.06 mM),Sonication is recommended. H2O: 50 mg/mL (132.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.31 mM),Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (26.56 mM),Suspension. *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	2.6563 mL	13.2813 mL	26.5625 mL
5 mM	0.5313 mL	2.6563 mL	5.3125 mL
10 mM	0.2656 mL	1.3281 mL	2.6563 mL
50 mM	0.0531 mL	0.2656 mL	0.5313 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

Lee ZW, et al. The slow-releasing hydrogen sulfide donor, GYY4137, exhibits novel anti-cancer effects in vitro and in vivo. PLoS One. 2011;6(6):e21077.
Liu M, Zeng C, Zhang Y, et al.Protective role of hydrogen sulfide against diabetic cardiomyopathy by inhibiting pyroptosis and myocardial fibrosis.Biomedicine & Pharmacotherapy.2024, 175: 116613.
Li L, et al. The complex effects of the slow-releasing hydrogen sulfide donor GYY4137 in a model of acute joint inflammation and in human cartilage cells. J Cell Mol Med. 2013;17(3):365-376.
Li L, et al. Characterization of a novel, water-soluble hydrogen sulfide-releasing molecule (GYY4137): new insights into the biology of hydrogen sulfide. Circulation. 2008;117(18):2351-2360.