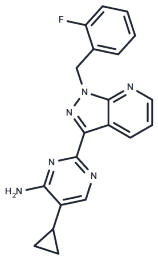
Data Sheet (Cat.No.T6775)

TargetMol

BAY 41-2272

Chemical Properties



CAS No. : 256376-24-6

Formula: C20H17FN6

Molecular Weight: 360.39

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	BAY 41-2272 is a direct and NO-independent soluble guanylate cyclase (sGC) stimulator.
Targets(IC50)	Guanylate cyclase
In vitro	In vitro, BAY 41-2272 results in concentration dependent relaxation of human and rabbit cavernosum with EC50 of 489.1 nM and 406.3 nM, respectively. [3]
In vivo	In female spontaneously hypertensive rats, BAY 41-2272 (10 mg/kg, p.o.) shows antiplatelet effect, strongly decreases blood pressure and increases survival. [2] In C. albicans-infected mice, BAY 41-2272 (10 mg/kg, i.p.) markedly increases macrophage-dependent cell influx to the peritoneum in addition to macrophage functions, and reduces the death rate. [4] In db/db-/- type II diabetic and obese mice, BAY 41-2272 improves impaired corpus cavernosum (CC) relaxation. [5]

Solubility Information

Solubility	DMSO: 36 mg/mL (99.89 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: 1 mg/mL (2.77 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	2.7748 mL	13.8739 mL	27.7477 mL
5 mM	0.555 mL	2.7748 mL	5.5495 mL
10 mM	0.2775 mL	1.3874 mL	2.7748 mL
50 mM	0.0555 mL	0.2775 mL	0.555 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

Becker EM, et al. BMC Pharmacol. 2001, 1, 13.
Stasch JP, et al. Nature. 2001, 410(6825), 212-215.
Kalsi JS, et al. J Urol. 2003, 169(2), 761-766.
Soeiro-Pereira PV, et al. Mem Inst Oswaldo Cruz. 2015, 110(1), 75-85.
Nunes KP, et al. J Pharmacol Exp Ther. 2015, 353(2), 330-339.
Tuttle TR, et al. The cyclic GMP/protein kinase G pathway as a therapeutic target in head and neck squamous cell carcinoma. Cancer Lett. 2016 Jan 28;370(2):279-85.