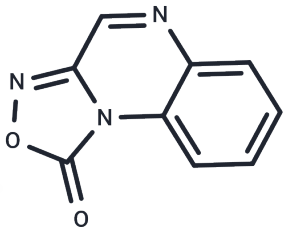
Data Sheet (Cat.No.T19777)

TargetMol

ODQ

Chemical Properties



CAS No. : 41443-28-1

Formula: C9H5N3O2

Molecular Weight: 187.15

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	ODQ is an effective and selective soluble guanylyl cyclase (sGC) inhibitor.
Targets(IC50)	Apoptosis,Guanylate cyclase

Solubility Information

Solubility	DMSO: 83.33 mg/mL (445.26 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 5 mg/mL (26.72 mM),Sonication is recommended. 10% DMSO+90% Saline: < 8.33 mg/mL (44.51 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 8.33 mg/mL (44.51 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	5.3433 mL	26.7165 mL	53.4331 mL
5 mM	1.0687 mL	5.3433 mL	10.6866 mL
10 mM	0.5343 mL	2.6717 mL	5.3433 mL
50 mM	0.1069 mL	0.5343 mL	1.0687 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

Garthwaite J, Southam E, Boulton CL, Nielsen EB, Schmidt K, Mayer B. Potent and selective inhibition of nitric oxide-sensitive guanylyl cyclase by 1H-[1,2,4]oxadiazolo[4,3-a]quinoxalin-1-one. Mol Pharmacol. 1995 Aug;48(2):184-8. PubMed PMID: 7544433.

Zhang T, Lei J, Zheng M, et al.Nitric oxide facilitates the S-nitrosylation and deubiquitination of Notch1 protein to maintain cancer stem cells in human NSCLC.Journal of Cellular and Molecular Medicine.2024, 28(21): e70203.

Schrammel A, Behrends S, Schmidt K, Koesling D, Mayer B. Characterization of 1H-[1,2,4]oxadiazolo[4,3-a] quinoxalin-1-one as a heme-site inhibitor of nitric oxide-sensitive guanylyl cyclase. Mol Pharmacol. 1996 Jul;50(1): 1-5. PubMed PMID: 8700100.