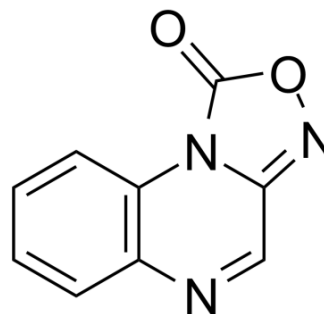


ODQ

Cat. No.:	HY-101255		
CAS No.:	41443-28-1		
Molecular Formula:	C ₉ H ₅ N ₃ O ₂		
Molecular Weight:	187.15		
Target:	Guanylate Cyclase; Apoptosis		
Pathway:	GPCR/G Protein; Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (534.33 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			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
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 5 mg/mL (26.72 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	ODQ is a potent and selective soluble guanylyl cyclase (sGC, nitric oxide-activated enzyme) inhibitor. ODQ enhances the pro-apoptotic effects of Cisplatin in human mesothelioma cells ^[1] .
In Vitro	At 30 and 50 μM, ODQ causes significant induction of apoptosis in the NCI-H2452 cells, elevating apoptotic levels by 12 fold and 15 fold, respectively. At 10μM, a concentration below the threshold for induction of apoptosis by ODQ, ODQ in combination with Cisplatin enhanced (in fact, doubled) the pro-apoptotic effects of Cisplatin at 1 μM ^[1] .
In Vivo	ODQ (2 mg/kg; i.p.) reduces the multiple organ injury and dysfunction caused by wall fragments of Gram-positive or Gram-negative bacteria in the anesthetized rat ^[2] .

Animal Model:	Anesthetized, male Wistar rats ^[2]
Dosage:	2 mg/kg
Administration:	I.p.
Result:	Attenuated the renal dysfunction, lung injury, and hepatocellular injury caused by lipoteichoic acid/peptidoglycan or lipopolysaccharide.

REFERENCES

[1]. Ronald Fiscus, et al. ODQ, an inhibitor of soluble guanylyl cyclase (nitric oxide-activated enzyme), enhances the pro-apoptotic effects of cisplatin in human mesothelioma cells. *Cancer Res* May 1 2007 (67) (9 Supplement) LB-43.

[2]. Zacharowski K, et al. The selective guanylate cyclase inhibitor ODQ reduces multiple organ injury in rodent models of Gram-positive and Gram-negative shock. *Crit Care Med*. 2001;29(8):1599-1608.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA