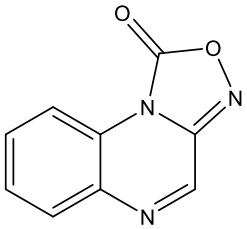
Catalog # 10-1211

ODQ

CAS# 41443-28-1

1H-[1,2,4]Oxadiazolo[4,3-a]quinoxalin-1-one

Lot # X101781



A potent and selective inhibitor of soluble guanylyl cyclase (sGC), IC_{50} = 20 nM).[1] ODQ acts via competition with NO for the heme site of sGC where it binds irreversibly.[2] ODQ does not inhibit NO-mediated macrophage toxicity, an activity that is unrelated to cGMP nor does it inhibit particulate GC.[1] ODQ is an extremely useful tool to explore the involvement of the NO-cGMP pathway in cellular signaling and physiologic processes.[3-5]

1) Garthwaite *et al*. (1995), *Potent and Selective Inhibition of Nitric Oxide-sensitive Guanylyl Cyclase by 1H-[1,2,4]Oxadiazolo[4,3-a]quinoxalin-1-one*; Mol. Pharmacol. **48** 184

2) Schrammel *et al*. (1996), *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. **50** 1

3) Estevez *et al*. (1998), *Nitric oxide-dependent production of cGMP supports the survival of rat embryonic motor neurons cultured with brain-derived neurotrophic factor;* J. Neurosci. **18** 3708

4) Vandecasteele *et al*. (1998), *Role of the NO-cGMP in the muscarinic regulation of the L-type Ca^{2+} current in human atrial myocytes;* J. Physiol. **506** 653

5) Martins-Pinge *et al*. (1999), *Nitric oxide-dependent guanylyl cyclase participates in the glutamatergic neurotransmission within the rostral ventrolateral medulla of awake rats;* Hypertension **34** 748

PHYSICAL DATA

Molecular Weight:	187.15
Molecular Formula:	$C_9H_5N_3O_2$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (40 mg/ml)
Physical Description:	Pale-yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase.
	Solutions in DMSO may be stored at -20°C for up to 3 months

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