

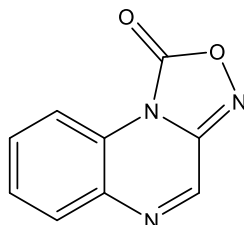
**Catalog # 10-1211**

**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).<sup>1</sup> ODQ acts via competition with NO for the heme site of sGC where it binds irreversibly.<sup>2</sup> ODQ does not inhibit NO-mediated macrophage toxicity, an activity that is unrelated to cGMP nor does it inhibit particulate GC.<sup>1</sup> ODQ is an extremely useful tool to explore the involvement of the NO-cGMP pathway in cellular signaling and physiologic processes.<sup>3-5</sup>

- 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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