

# **Data Sheet**

Product Name:	Prinoxodan
Cat. No.:	CS-7332
CAS No.:	111786-07-3
Molecular Formula:	C <sub>13</sub> H <sub>13</sub> N <sub>4</sub> O <sub>2</sub>
Molecular Weight:	257.27
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Solubility:	10 mM in DMSO

# **BIOLOGICAL ACTIVITY:**

Prinoxodan (RGW2938) is a **phosphodiesterase** inhibitor. IC50 & Target: Phosphodiesterase<sup>[1]</sup> **In Vitro:** Prinoxodan (RG W-2938) is an orally effective positive inotropic/vasodilator agent. Prinoxodan is a new nonglycoside, noncatecholamine cardiotonic/vasodilator agent is examined in vitro in isolated guinea pig hearts; in the latter, Prinoxodan 5 nmol-5 µmol increases contractility in a dose-related fashion<sup>[2]</sup>. **In Vivo:** Prinoxodan (RG W-2938) is a new nonglycoside, noncatecholamine cardiotonic/vasodilator agent is examined in vivo in anesthetized and conscious dogs. Prinoxodan 30-300 µg/kg administered intravenously (i.v.) to anesthetized dogs increases contractile force while decreasing arterial pressure and total peripheral resistance (TPR) in a dose-related manner. Heart rate (HR) is only slightly increased, and aortic flow is not appreciably altered. A single oral dose of Prinoxodan 0.3 mg/kg administered to conscious chronically instrumented dogs produces a marked and sustained increase in contractility 15-240 min after treatment while only slightly increasing HR. The effects of Prinoxodan 30-300 µg/kg, i.v. are studied in a mecamylamine-propranolol-induced model of heart failure. Prinoxodan effectively reverses the drug-induced heart failure by increasing myocardial contractility and decreasing arterial pressure while only slightly affecting HR<sup>[2]</sup>.

#### **References:**

[1]. Artigou JY, et al. [Evaluation of a new cardiotonic agent on human isolated atrium]. Ann Cardiol Angeiol (Paris). 1993 Feb;42(2):79-82.

[2]. Barrett JA, et al. Pharmacology of RG W-2938: a cardiotonic agent with vasodilator activity. J Cardiovasc Pharmacol. 1990 Oct;16(4):537-45.

### **CAIndexNames:**

2(1H)-Quinazolinone, 3,4-dihydro-3-methyl-6-(1,4,5,6-tetrahydro-6-oxo-3-pyridazinyl)-

## SMILES:

O=C1NC2=C(C=C(C3=N[N]C(CC3)=O)C=C2)CN1C

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

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