

# **Certificate of Analysis**

Print Date: Apr 28th 2015

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Product Name: Idazoxan hydrochloride Catalog No.: 0793 Batch No.: 5

CAS Number: 79944-56-2

IUPAC Name: 2-(1,4-Benzodioxan-2-yl)-2-imidazoline hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{11}H_{12}N_2O_2$ .HCl

Batch Molecular Weight: 240.69

Physical Appearance: White crystalline solid Solubility: water to 100 mM

phosphate buffered saline to 50 mM

Storage: Store at RT

Batch Molecular Structure:

#### 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.49$  (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point: At 213°C

HPLC: Shows >98.8% purity

1H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 54.89 5.44 11.63 Found 54.88 5.51 11.88



# **Product Information**

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### **Description:**

 $\alpha_2$ -adrenoceptor antagonist, and  $I_2$  ligand, selective over  $I_1$  sites (pK<sub>i</sub> values are 5.90, 7.22, 8.01, 7.43, and 7.7 for  $I_1$ ,  $I_2$ ,  $\alpha_{2A}$ ,  $\alpha_{2B}$ , and  $\alpha_{2C}$  receptors respectively).

### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>11</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>.HCl

Batch Molecular Weight: 240.69

Physical Appearance: White crystalline solid

Minimum Purity: >98%

#### **Batch Molecular Structure:**

.HCI

Storage: Store at RT

#### Solubility & Usage Info:

water to 100 mM

phosphate buffered saline to 50 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Dabir** (1986) Idazoxan: a novel pharmacological tool for the study of  $\alpha_2$ -adrenoceptors. J.Pharmacol. **17** 113. PMID: 2875218.

Michel and Ernsberger (1992) Keeping an eye on the I site: imidazoline-preferring receptors. TIPS 13 369. PMID: 1413085.

**Berdeu** *et al* (1995) Evidence for two different imidazoline sites on pancreatic B cells and vascular bed in rat. Eur.J.Pharmacol. **275** 91. PMID: 7774667.

Eglen et al (1998) 'Seeing through a glass darkly': casting light on imidazoline 'I' sites. TiPS 19 381. PMID: 9786027.

