

# **Certificate of Analysis**

Print Date: Jan 15<sup>th</sup> 2016

www.tocris.com

Product Name: Fenoldopam hydrochloride Catalog No.: 1659 Batch No.: 1

CAS Number: 181217-39-0

IUPAC Name: 6-Chloro-2,3,4,5-tetrahydro-1-(4-hydroxyphenyl)-1*H*-3-benzazepine-7,8-diol hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{16}H_{16}CINO_3.HCI$ 

Batch Molecular Weight: 342.22
Physical Appearance: Tan solid

**Solubility:** water to 10 mM

DMSO to 100 mM

Storage: Desiccate at +4°C

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

Melting Point: At 270°C(dec)

HPLC: Shows >98.1% purity

<sup>1</sup>H NMR: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.16 5.01 4.09 Found 56.07 5.06 4.01



# **Product Information**

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#### **Description:**

Selective  $D_1$ -like dopamine receptor partial agonist (EC<sub>50</sub> = 57 nM). Vasodilator in vivo and does not readily cross the bloodbrain barrier. Also  $\alpha_2$ -adrenoceptor antagonist in vitro ( $K_i$  = 15 - 25 nM)

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

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Batch Molecular Weight: 342.22 Physical Appearance: Tan solid

Minimum Purity: >98%

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

Storage: Desiccate at +4°C

#### Solubility & Usage Info:

water to 10 mM DMSO to 100 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:

**Hahn** *et al* (1982) Characterization of the peripheral and central effects of SK&F 82526, a novel dopamine receptor agonist. J.Pharmacol.Exp.Ther. **223** 305. PMID: 6127401.

**Sibley** *et al* (1982) Interactions of novel dopaminergic ligands with D-1 and D-2 dopamine receptors. Life Sci. *31* 637. PMID: 6127585. **Nichols** *et al* (1990) The pharmacology of fenoldopam. Am.J.Hypertens. *3* 116S. PMID: 1974439.