

Certificate of Analysis

Product Name: Fenoldopam hydrochloride

Catalog No.: 1659

Batch No.: 2

CAS Number: 181217-39-0

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

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₆H₁₆ClNO₃·HCl·1½H₂O

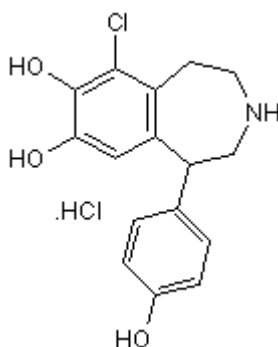
Batch Molecular Weight: 369.24

Physical Appearance: Brown solid

Solubility: water to 10 mM
DMSO to 100 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.24 (Chloroform:Methanol [7:3])

HPLC: Shows 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	52.05	5.46	3.79
Found	52.17	5.44	3.75

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Description:

Selective D₁-like dopamine receptor partial agonist (EC₅₀ = 57 nM). Vasodilator in vivo and does not readily cross the blood-brain barrier. Also α₂-adrenoceptor antagonist in vitro (K_i = 15 - 25 nM).

Physical and Chemical Properties:

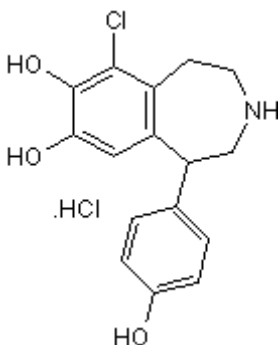
Batch Molecular Formula: C₁₆H₁₆ClNO₃.HCl.1½H₂O

Batch Molecular Weight: 369.24

Physical Appearance: Brown 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.

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