

Certificate of Analysis

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Product Name: PD 168568 dihydrochloride

Catalog No.: 3529

Batch No.: 1

CAS Number: 210688-56-5

IUPAC Name: 3-[2-[4-(3,4-dimethylphenyl)-1-piperazinyl]ethyl]-2,3-dihydro-1*H*-isoindol-1-one dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{27}N_3O \cdot 2HCl \cdot H_2O$

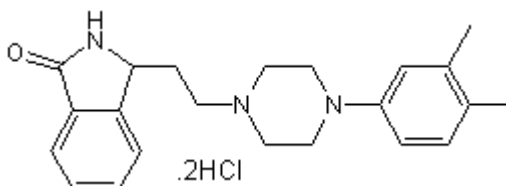
Batch Molecular Weight: 440.41

Physical Appearance: White solid

Solubility: water to 50 mM
DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	57.9	6.85	9.14
Found	58.21	6.57	9.21

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Potent and selective dopamine D₄ receptor antagonist (K_i values are 8.8 and 1842 nM at D₄ and D₂ receptors respectively). Reverses amphetamine-stimulated locomotion in vivo and is orally active.

Physical and Chemical Properties:

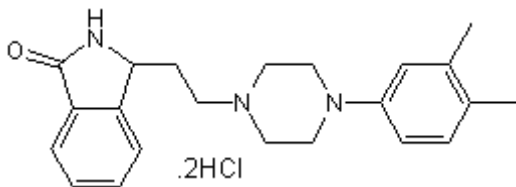
Batch Molecular Formula: C₂₂H₂₇N₃O.2HCl.H₂O

Batch Molecular Weight: 440.41

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 50 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:

Belliotti et al (1998) Isoindolinone enantiomers having affinity for the dopamine D₄ receptor. *Bioorg.Med.Chem.Lett.* **8** 1499. PMID: 9873377.

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