

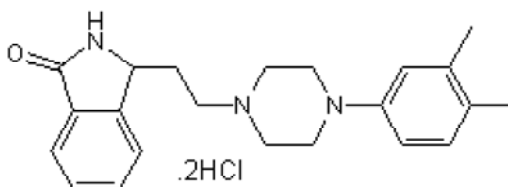
## Certificate of Analysis

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**Product Name:** PD 168568 dihydrochloride **Catalog No.:** 3529 **Batch No.:** 1  
**CAS Number:** 1782532-06-2  
**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<sub>22</sub>H<sub>27</sub>N<sub>3</sub>O.2HCl.H<sub>2</sub>O  
**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  
**<sup>1</sup>H 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

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**Description:**

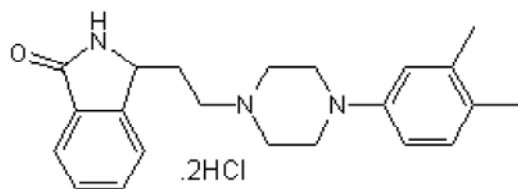
Potent and selective dopamine D<sub>4</sub> receptor antagonist (K<sub>i</sub> values are 8.8 and 1842 nM at D<sub>4</sub> and D<sub>2</sub> receptors respectively). Reverses amphetamine-stimulated locomotion in vivo and is orally active.

**Physical and Chemical Properties:**

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 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 DA D<sub>4</sub> receptor. *Bioorg.Med.Chem.Lett.* **8** 1499. PMID: 9873377.

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