

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** Phenserine

**Catalog No.:** 2967

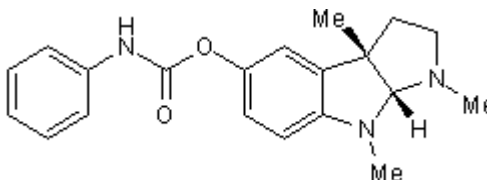
**Batch No.:** 3

**CAS Number:** 101246-66-6

**IUPAC Name:** (3a*S*,8a*R*)-1,2,3,3a,8,8a-Hexahydro-1,3a,8-trimethylpyrrolo[2,3-*b*]indol-5-ol 5-(*N*-phenylcarbamate)

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>20</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 337.42  
**Physical Appearance:** Beige solid  
**Solubility:** DMSO to 10 mM  
 ethanol to 25 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 99% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	71.19	6.87	12.45
Found	70.87	6.85	12.37

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

## Product Information

[www.tocris.com](http://www.tocris.com)

**Product Name:** Phenserine

**Catalog No.:** 2967

**Batch No.:** 3

**CAS Number:** 101246-66-6

**IUPAC Name:** (3aS,8aR)-1,2,3,3a,8,8a-Hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-ol 5-(*N*-phenylcarbamate)

### Description:

Physostigmine analog that inhibits acetylcholinesterase. Inhibits production of amyloid precursor protein (APP) and Aβ. Improves morris water maze performance of scopolamine-treated rats.

### Physical and Chemical Properties:

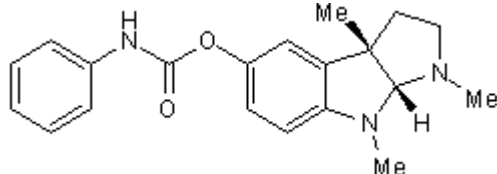
Batch Molecular Formula: C<sub>20</sub>H<sub>23</sub>N<sub>3</sub>O<sub>2</sub>

Batch Molecular Weight: 337.42

Physical Appearance: Beige solid

**Minimum Purity:** >98%

### Batch Molecular Structure:



**Storage:** Store at +4°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

### Solubility & Usage Info:

DMSO to 10 mM

ethanol to 25 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:

**Janas *et al*** (2005) The cholinesterase inhibitor, phenserine, improves morris water maze performance of scopolamine-treated rats. *Life Sci.* **76** 1073. PMID: 15620572.

**Utsuki *et al*** (2006) Identification of novel small molecule inhibitors of amyloid precursor protein synthesis as a route to lower Alzheimer's disease amyloid-β peptide. *J.Pharmacol.Exp.Ther.* **318** 855. PMID: 16690718.

**Klein** (2007) Phenserine. *Expert Opin.Investig.Drugs* **16** 1087. PMID: 17594192.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956