

## Certificate of Analysis

**Product Name:** Vinpocetine

CAS Number: 42971-09-5

IUPAC Name: (3 $\alpha$ ,16 $\alpha$ )-Eburnamenine-14-carboxylic acid ethyl ester

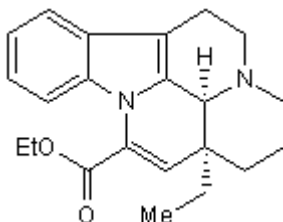
**Catalog No.:** 0757

**Batch No.:** 2

EC Number: 256-028-0

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 350.46  
**Physical Appearance:** White solid  
**Solubility:** ethanol to 50 mM  
DMSO to 10 mM with gentle warming  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.55 (Dichloromethane:Methanol [10:1])  
**Melting Point:** Between 156 - 157°C  
**HPLC:** Shows >99.8% purity  
<sup>1</sup>H NMR: Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	75.4	7.48	7.99
Found	75.73	7.53	8

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**Description:**

Phosphodiesterase inhibitor, selective for PDE1 (IC<sub>50</sub> = 21  $\mu$ M). Also blocks voltage-gated Na<sup>+</sup> channels.

**Physical and Chemical Properties:**

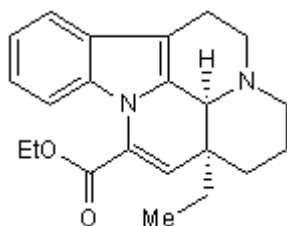
Batch Molecular Formula: C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>

Batch Molecular Weight: 350.46

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

ethanol to 50 mM

DMSO to 10 mM with gentle warming

**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:**

Merck Index **12** 10128.

**Hagiwara et al** (1984) Effect of vinpocetine on cyclic nucleotide metabolism in vascular smooth muscle. *Biochem.Pharmacol.* **33** 453. PMID: 6322804.

**Molnar and Erdo** (1995) Vinpocetine is as potent as phenytoin to block voltage-gated Na<sup>+</sup> channels in rat cortical neurons. *Eur.J.Pharmacol.* **273** 303. PMID: 7737339.

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