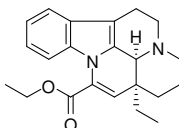




## Certificate of Analysis

**Axon Catalogue ID:** 3889 **Batch Number:** 1  
**Product Name:** Vinpocetine  
**Alternative Name(s):** Ethyl apovincamin; RGH4405  
**IUPAC Name:** (41S,13aS)-Ethyl 13a-ethyl-2,3,4,1,5,6,13a-hexahydro-1H-indolo[3,2,1-ij]pyrido[3,2,1-de][1,5]naphthyridine-12-carboxylate

**Structure:**



**Amount:**

**CAS number(s):** 42971-09-5  
**Molecular Formula:** C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub> **Molecular Weight:** 350.45  
**Batch Molecular Formula:** C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub> **Batch Molecular Weight:** 350.45  
**Appearance:** White solid **Observed mp:** 151 - 153 °C  
**TLC (R<sub>f</sub>):** 0.67 DCM/MeOH (9:1)  
**Chemical Purity:** 99.7%  
**Optical Purity (ee):** Optically pure  
**Optical Rotation (Det.):** [α]<sub>D</sub> = +160.5° with c = 1 in DMF  
**<sup>1</sup>H-NMR:** Analytical data confirm chemical structure  
**Mass Spec:** Analytical data confirm chemical structure  
**Microanalysis:** Calculated: C 75.40, H 7.48, N 7.99; Found: C 75.27, H 7.62, N 7.93  
**Storage Conditions:** Store at +4 °C

Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water	0.0	0.0	Insoluble
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)	22.0	62.8	
	DMSO	2.8	7.8	
	EtOH	2.9	8.3	

**Remarks:**

**QC Date:** 6-4-2023

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to [info@axonmedchem.com](mailto:info@axonmedchem.com) indicating Catalogue ID and Batch number.

**Caution: Not fully tested. For research purposes only**