

PRODUCT INFORMATION



Vindoline

Item No. 11765

CAS Registry No.: 2182-14-1
Formal Name: (2 β ,3 β ,4 β ,5 α ,12R,19 α)-4-(acetyloxy)-6,7-didehydro-3-hydroxy-16-methoxy-1-methyl-methyl ester-aspidospermidine-3-carboxylic acid

Synonym: NSC 91994

MF: C₂₅H₃₂N₂O₆

FW: 456.5

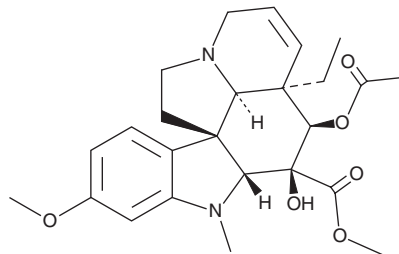
Purity: \geq 98%

UV/Vis.: λ_{max} : 213, 251, 304 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Vindoline is supplied as a crystalline solid. A stock solution may be made by dissolving the vindoline in the solvent of choice, which should be purged with an inert gas. Vindoline is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of vindoline in DMSO is approximately 3 mg/ml and approximately 5 mg/ml in ethanol and DMF.

Vindoline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, vindoline should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Vindoline has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Vindoline, a major alkaloid from the leaves of *C. roseus*, is a biologically active compound used as starting material for the synthesis of the anticancer antibiotics vinblastine and vincristine.¹⁻³

References

1. Haque, I.U. and Saba, H. Vindoline and its reactions. *J. Chem. Soc. Pak.* **33(6)**, 905-915 (2011).
2. Sharma, V., Chaudhary, S., Srivastava, S., *et al.* Characterization of variation and quantitative trait loci related to terpenoid indole alkaloid yield in a recombinant inbred line mapping population of *Catharanthus roseus*. *J. Genet.* **91(1)**, 49-69 (2012).
3. He, L., Yang, L., Tan, R., *et al.* Enhancement of vindoline production in suspension culture of the *Catharanthus roseus* cell line C20hi by light and methyl jasmonate elicitation. *Anal. Sci.* **27(12)**, 1243-1248 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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