



Product Information

Product ID V3355

CAS No. 2182-14-1

Chemical Name (2B,3B,4B,5a,12B,19a)-4-(Acetyloxy)-6,7-didehydro-3-hydroxy-16-methoxy-1-methyl-aspidospermidine-3-carboxylic acid methyl ester

Synonym Vindolin, NSC 91994

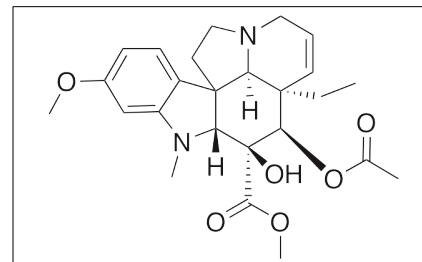
Formula C₂₅H₃₂N₂O₆

Formula Wt. 456.53

Melting Point 164-165°C

Purity ≥98%

Solubility Soluble in chloroform or ethanol.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
V3355	25 mg	\$87.60
V3355	100 mg	\$243.10
V3355	500 mg	\$738.90

Store Temp -20°C

Ship Temp Ambient

Description Vindoline is a semi-synthetic vinca alkaloid originally found in *Catharanthus* that exhibits anti-diabetic and antacid activities; it is an intermediate in the synthesis of vinblastine. Unlike other vinca alkaloids, vindoline is only weakly cytotoxic, binding poorly to tubulin. Vindoline increases glucose-stimulated insulin release and inhibits Kv2.1 K⁺ channels, decreasing outward K⁺ current and lowering blood glucose, Hb1Ac, and triglyceride levels in animal models of diabetes. Vindoline also inhibits H⁺/K⁺ ATPases, potentially decreasing gastric acid secretion.

References Yao XG, Chen F, Li P, et al. Natural product vindoline stimulates insulin secretion and efficiently ameliorates glucose homeostasis in diabetic murine models. *J Ethnopharmacol.* 2013 Oct 28;150(1):285-97. PMID: 24012527.

Freitas CS, Baggio CH, Mayer B, et al. Inhibition of gastric H⁺, K(+) -ATPase activity by compounds from medicinal plants. *Nat Prod Commun.* 2011 Sep;6(9):1253-4. PMID: 21941891.

Sertel S, Fu Y, Zu Y, et al. Molecular docking and pharmacogenomics of vinca alkaloids and their monomeric precursors, vindoline and catharanthine. *Biochem Pharmacol.* 2011 Mar 15;81(6):723-35. PMID: 21219884.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.