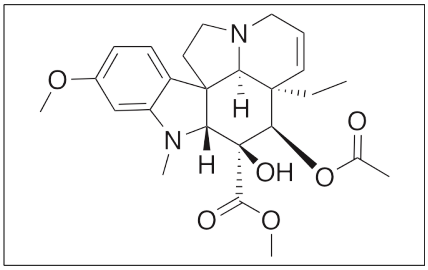
LKT Laboratories, Inc.

Vindoline

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID V3355
CAS No. 2182-14-1
Chemical Name (2β,3β,4β,5α,12β,19α)-4-(Acetyloxy)-6,7-didehydro- 3-hydroxy-16-methoxy-1-methyl-aspidospermidine-3-carboxylic acid methyl ester
Synonym Vindolin, NSC 91994



Formula $C_{25}H_{32}N_2O_6$
Formula Wt. 456.53
Melting Point 164-165°C
Purity ≥98%
Solubility Soluble in chloroform or ethanol.

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
V3355	25 mg	$67.40
V3355	100 mg	$187.30
V3355	500 mg	$569.30

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.