**Natural Products** 



# **Vindoline Datasheet**

Ĥ

5<sup>th</sup> Edition (Revised in January, 2017)

#### [ Product Information ]

Name: Vindoline

Catalog No.: CFN98083

Cas No.: 2182-14-1

**Purity:** >=98%

M.F: C<sub>25</sub>H<sub>32</sub>N<sub>2</sub>O<sub>6</sub>

**M.W:** 456.5

Physical Description: Powder

Synonyms:4-Acetoxy-3-hydroxy-16-methoxy-1-methyl-6,7-didehydro-aspidospermidine-

3-carboxylic acid methyl ester.

#### [ Intended Use ]

- 1. Reference standards;
- 2. Pharmacological research;
- 3. Synthetic precursor compounds;
- 4. Intermediates & Fine Chemicals;
- 5. Others.

#### [Source]

The herbs of Catharanthus roseus (L.) G. Don.

#### [Biological Activity or Inhibitors]

Vindoline can enhance the glucose-stimulated insulin secretion (GSIS) in MIN6 cells with the  $EC_{50}$  value of 50.2uM.<sup>[1]</sup>

Vindoline has relaxant effect in isolated rat renal arteries, it can dilate renal arteries in vitro through one or more pathways including inhibition of calcium entry,TEA+-sensitive potassium channel or protein kinase pathways in vascular smooth muscle cells.<sup>[2]</sup> Vincamine and vindoline have anti-ulcer activity, they significantly showing protection against Cold Restraint Ulcer (CRU) 81.08 and 81.20%, respectively.<sup>[3]</sup>

#### [ Solvent ]

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

#### [ HPLC Method ]<sup>[4]</sup>

Mobile phase: Acetonitrile-0.1M Phosphate buffer containing 0.5% glacial acetic acid =21:79( pH 3.5). Flow rate:1.2 ml/min; Column temperature: 30°C; The wave length of determination:254 nm.

### [Storage]

 $2\text{-}8^\circ\!\mathbb{C},$  Protected from air and light, refrigerate or freeze.

### [ References ]

[1] Xiao C, Tian Y, Lei M, et al. Bioorg. Med. Chem. Lett., 2017 Mar 1;27(5):1316-8.

[2] Li Y, Deng L J, Wu X L, et al. Chinese Pharmacological Bulletin, 2012, 28(8):1096 -100.

[3] Lakshmi V. Pharmacologia, 2013, 4(2013):243-8.

[4]Gupta M M, Singh D V, Tripathi A K, et al. J. Chromatogr. Sci., 2005 Oct; 43(9): 450-3.

## [ Contact ]

Address: S5-3 Building, No. 111, Dongfeng Rd., Wuhan Economic and Technological Development Zone, Wuhan, Hubei 430056, China Email: info@chemfaces.com Tel: +86-27-84237783 Fax: +86-27-84254680 Web: www.chemfaces.com Tech Support: service@chemfaces.com