**Proteins** 

# **Screening Libraries**

# **Product** Data Sheet

## Vindoline

Cat. No.: HY-N0687 CAS No.: 2182-14-1 Molecular Formula:  $C_{25}H_{32}N_2O_6$ Molecular Weight: 456.53

Target: Microtubule/Tubulin

Pathway: Cell Cycle/DNA Damage; Cytoskeleton

Storage: 4°C, protect from light

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 250 mg/mL (547.61 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1904 mL	10.9522 mL	21.9044 mL
	5 mM	0.4381 mL	2.1904 mL	4.3809 mL
	10 mM	0.2190 mL	1.0952 mL	2.1904 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 6.25 mg/mL (13.69 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 6.25 mg/mL (13.69 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 6.25 mg/mL (13.69 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Vindoline, a vinca alkaloid extracted from the leaves of Catharanthus roseus, weakly inhibits tubulin self-assembly<sup>[1]</sup>.

### **REFERENCES**

[1]. Prakash V, et al. Mechanism of interaction of vinca alkaloids with tubulin: catharanthine and vindoline. Biochemistry. 1991 Jan 22;30(3):873-80.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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