



# **Certificate of Analysis**

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Product Name: Vinblastine sulfate Catalog No.: 1256 Batch No.: 3

CAS Number: 143-67-9 EC Number: 205-606-0

IUPAC Name: Vincaleukoblastine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:**  $C_{46}H_{58}N_4O_9.H_2SO_4.4H_2O$ 

Batch Molecular Weight: 981.12

**Physical Appearance:** Off White solid **Solubility:** water to 100 mM

DMSO to 100 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

**HPLC:** Shows 95.4% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 56.31 6.99 5.71 Found 55.91 6.98 5.7

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

www.tocris.com/distributors Tel:+1 612 379 2956



## **Product Information**

Print Date: Nov 3<sup>rd</sup> 2020

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CAS Number: 143-67-9 EC Number: 205-606-0

IUPAC Name: Vincaleukoblastine

#### **Description:**

Anticancer agent; microtubule disrupter. Induces apoptosis in cultured hepatocytes and human lymphoma cells. Shown to inhibit autophagosome maturation.

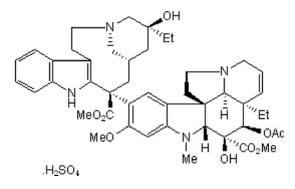
## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>9</sub>.H<sub>2</sub>SO<sub>4</sub>.4H<sub>2</sub>O

Batch Molecular Weight: 981.12 Physical Appearance: Off White solid

Minimum Purity: ≥95%

### **Batch Molecular Structure:**



Storage: Store at -20°C

## Solubility & Usage Info:

water to 100 mM DMSO to 100 mM

## Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Veldhoen** *et al* (2012) The chemotherapeutic agent PacT. inhibits autophagy through two distinct mechanisms that regulate apoptosis. Oncogene **32** 736. PMID: 22430212.

Rai and Wolf (1998) Localization of critical histidyl residues required for vinblastine-induced tubulin polymerization and for microtubulin assembly. J.Biol.Chem. **273** 31131. PMID: 9813016.

**Tsukidate** *et al* (1993) Microtubule antagonists activate programmed cell death (apoptosis) in cultured rat hepatocytes. Am.J.Pathol. *143* 918. PMID: 8362985.

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