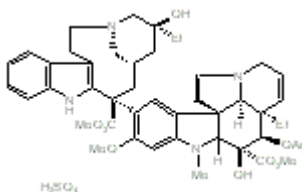


**Product Name:** Vinblastine sulfate  
CAS Number: 143-67-9  
IUPAC Name: Vincal leukoblastine

**Catalog No.:** 1256 **Batch No.:** 1  
**EC Number:** 205-606-0

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:**  $C_{46}H_{58}N_4O_9 \cdot H_2SO_4 \cdot 4H_2O$   
**Batch Molecular Weight:** 981.1611  
**Physical Appearance:** White crystalline solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:**  $R_f = 0.47$  (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])  
**Melting Point:** Between 225 - 229°C(Dec)  
**HPLC:** Shows 95.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen			
Theoretical	56.31	6.98	5.71	0 0 0
Found	55.95	6.89	5.29	0 0 0

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

**Product Name:** Vinblastine sulfate

CAS Number: 143-67-9

IUPAC Name: Vincal leukoblastine

**Catalog No.:** 1256

EC Number: 205-606-0

**Batch No.:** 1

**Description:**

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

**Physical and Chemical Properties:**

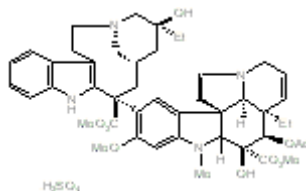
Batch Molecular Formula: C<sub>46</sub>H<sub>58</sub>N<sub>4</sub>O<sub>9</sub>.H<sub>2</sub>SO<sub>4</sub>.4H<sub>2</sub>O

Batch Molecular Weight: 981.1611

Physical Appearance: White crystalline solid

**Minimum Purity:** >95%

**Batch Molecular Structure:**



**Storage:** Desiccate at +4°C

**Solubility & Usage Info:**

water 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:**

**Jordan et al** (1985) Comparison of the effects of vinblastine, vincristine, vindesine, and vinepidine on microtubule dynamics and cell proliferation *in vitro*. *Cancer Res.* **45** 2741. PMID: 3986806.

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

**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.

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

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