

## Catalog # 10-2050 Vinblastine sulfate

CAS# 143-67-9 Vincaleukoblastine Lot # X101513

Semisynthetic alkaloidal anticancer agent. Induces cell cycle arrest at G2/M phase by inhibiting mitotic spindle formation<sup>1</sup>. Inhibits normal microtubule assembly and induces aberant tubulin polymerization<sup>1</sup>. Induces apoptosis in a variety of cell lines<sup>2</sup>. Inhibits autophagosome maturation<sup>3</sup>. Inhibits palmitoylation of tubulin<sup>4</sup>.

- 1) Hamel et al. (1996), Antimitotic natural products and their interactions with tubulin; Med. Res. Rev., 16 207
- 2) Tsukidate et al. (1993), Microtubule antagonists activate programmed cell death (apoptosis) in cultured rat hepatocytes; Am. J. Pathol., **143** 918
- 3) Satori et al. (2013), Describing autophagy via analysis of individual organelles by capillary electrophoresis with laser induced fluorescence detection; Anal. Chem., **85** 11391
- 4) Caron and Herwood (2007), Vinblastine, a chemotherapeutic drug, inhibits palmitoylation of tubulin in human leukemic lymphocytes; Chemotherapy, **53** 51

## **PHYSICAL DATA**

Molecular Weight: 909.08

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>

Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 25 mg/ml) or Water (up to 50 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or distilled water may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.