

## Vinblastine sulfate Cat. # AC-1007

Background: 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 aberrant 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>. Vinblastine sulfate inhibits microtubule formation and suppresses nAChR activity with IC<sub>50</sub> of 8.9  $\mu$ M in a cell-free

assay, used to treat certain kinds of cancer.

**Application:** Autophagy inhibitor: inhibits autophagosome maturation

## **Product Information**

Purity: 98% by TLC

**MW**: 909.1

Formula:  $C_{46}H_{58}N_4O_9$ .  $H_2SO_4$ 

**CAS No.** 143-67-9

Physical State: Lyophilized white crystalline powder

Amount: 5mg, 25mg

**Solubility:** 25 mg/mL in DMSO; 50 mg/mL in water

Storage: Store desiccated as supplied at -20°C for up to 1 year. Store solutions at -20°C

for up to 1 month.

## References

1. E Hamel Med. Res. Rev. 1996 16:207

2. K Tsukidate et al. Am. J. Pathol. 1993 143:918

3. CP Satori et al. Anal. Chem. 2013 85:11391

4. JM Caron and M Herwood Chemotherapy 2007 53:51

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