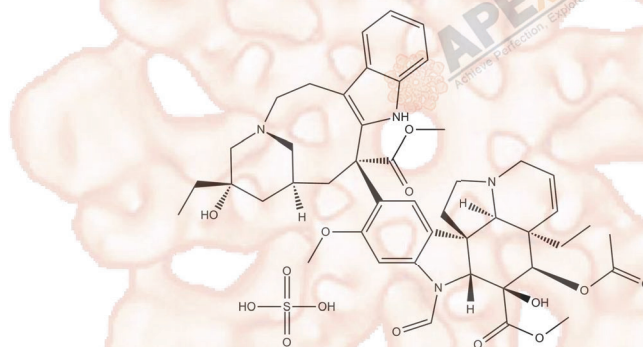


## Vincristine sulfate

<b>Cat. No.:</b>	A1765
<b>CAS No.:</b>	2068-78-2
<b>Formula:</b>	C <sub>46</sub> H <sub>58</sub> N <sub>4</sub> O <sub>14</sub> S
<b>M.Wt:</b>	923.04
<b>Synonyms:</b>	
<b>Target:</b>	Cell Cycle/Checkpoint
<b>Pathway:</b>	Microtubule/Tubulin
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥46.15mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		<b>1 mM</b>	1.0834 mL	5.4169 mL	10.8338 mL
		<b>5 mM</b>	0.2167 mL	1.0834 mL	2.1668 mL
		<b>10 mM</b>	0.1083 mL	0.5417 mL	1.0834 mL

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

### Biological Activity

Shortsummary

Microtubule disrupter, antitumor agent

IC<sub>50</sub> & Target

In Vitro

#### Cell Viability Assay

Cell Line: B16 melanoma cell

Preparation method: The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.

Reacting conditions: 10 ~ 100 nM; 3 days

Applications: In B16 melanoma cells, Vincristine inhibited the tubulin addition at assembly

ends of steady-state microtubules with the Ki value of 85 nM.

#### Animal experiment

Animal models: Mice bearing human rhabdomyosarcoma xenografts Rh12 or Rh18

Dosage form: 3 mg/kg; i.p.; a single dose

Applications: In mice bearing human rhabdomyosarcoma xenografts Rh12 or Rh18, Vincristine (3 mg/kg, i.p., a single dose) induced mean growth delay of > 120 and > 52 days, as well as repopulating fractions of 0.06% and 5%, respectively.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1]. Jordan MA, Himes RH, Wilson L. Comparison of the effects of vinblastine, vincristine, vindesine, and vinepidine on microtubule dynamics and cell proliferation in vitro. *Cancer Res.* 1985 Jun;45(6):2741-7.
- [2]. Baguley BC, Holdaway KM, Thomsen LL, Zhuang L, Zwi LJ. Inhibition of growth of colon 38 adenocarcinoma by vinblastine and colchicine: evidence for a vascular mechanism. *Eur J Cancer.* 1991;27(4):482-7.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

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