Creative Enzymes®

Vincristine Sulfate

Cat. No. CSUB-0947

Lot. No. (See product label)

Introduction

Description	Vincristine Sulfate, a dimeric Vinca alkaloid, has been shown to bind to Tubulin via a protein self association reaction. This compound acts as a Tubuiln inhibitor by binding to sites at the ends of microtubules, which regulate the inhibition of Tubulin dimer addition to microtubule ends. Experiments have reported Vincristine Sulfate to demonstrate a capacity to suppress growth of proliferating cells through marked apoptosis and cell cycle arrest at G2/M. The cell death caused by this agent seems to result in a sustained accumulation of endogenous ceramide levels. Ceramide, has been proposed as a lipid second messenger with specific antiproliferative mediating responses. Vincristine Sulfate is an inhibitor of MAO. Vincristine Sulfate is also a substrate of PGP and CYP3A4.
Applications	A cell cycle arresting, apoptotic inducing alkaloid
Synonyms	22-Oxovincaleukoblastine Sulfate; Leurocristine Sulfate; Kyocristine; Lilly 37231; NSC 67574; Novopharm; Oncovin; Onkovin; VCR Sulfate; Vincasar PFS; Vincrisul

Product Information

Form	Solid
CAS No.	2068-78-2
Molecular Formula	C46H56N4O10•H2SO4
Molecular Weight	923.04
Purity	>98%
Melting Point	300° C
Solubility	Soluble in water (25 mg/ml), ethanol, and methanol.
Substrates	PKA; CKII; PKCα

Storage and Shipping Information

Storage	Store at -20° C