

Product Name:	Valrubicin
Product Number:	V026
CAS Number:	56124-62-0
Molecular Formula:	$C_{34}H_{36}F_3NO_{13}$
Molecular Weight:	723.65
Form:	Powder
Appearance:	Orange to orange red crystalline powder
Source:	Synthetic
Storage Conditions:	$\leq 30^{\circ}C$ (avoid light)
Description:	Valrubicin is a semisynthetic derivative of the antineoplastic anthracycline antibiotic doxorubicin. It is used to treat bladder cancer.
Mechanism of Action:	Valrubicin is converted into N-trifluoroacetyl Adriamycin, which interacts with topoisomerase II, an enzyme that relaxes DNA supercoils. DNA replication and repair is inhibited, which prevents RNA synthesis and protein production, resulting in cell cycle arrest in phase G2. Valrubicin also accumulates in the cytoplasm where it inhibits protein kinase C.
References:	Onrust CV and Lamb HM (1999). Valrubicin. <i>Drugs Aging</i> 15:69-75 Sabnis N et al (2012) Enhanced solubility and functionality of valrubicin (AD-32) against cancer cells upon encapsulation into biocompatible nanoparticles. <i>Int J Nanomedicine</i> 7:975-983