



Valinomycin

Used for chromosome banding studies

Product Description

Name :	Valinomycin
Formal Name	3,6,9,15,18,21,27,30,33-Nonaisopropyl- 12,24,36-trimethyl-1,7,13,19,25,31- hexaoxa-4,10,16,22,28,34-hexaaza- cyclohexatriacontane- 2,5,8,11,14,17,20,23,26,29,32,35-dodecaone
Synonym	NSC122033
CAS number	2001-95-8
Catalog Number :	FP-09246B 25 mg
Molecular Weight : Purity	MW = 1,111.3 $C_{54}H_{90}N_6O_{18}$ >95%
Stability	$2 \text{ years at } -20^{\circ}\text{C}$
Solubility:	DMSO, EtOH, CH ₃ OH

Storage: -20°C. Protect from light and moisture

Valinomycin is a cyclododecadepsipeptide potassium-selective ionophore antibiotic that is isolated from various strains of Streptomyces. The hydrophilic interior is the right size to accommodate the potassium ion, but not other ions, while the hydrophobic exterior allows the complex to pass through the lipid bilayer. Valinomycin induces apoptosis in several cell types, including CHO cells, by stimulating potassium efflux. Apoptotic events produced by valinomycin include phosphatidylserine membrane translocation, caspase-3 activation, and mitochondrial membrane depolarization. Due to the ion-selective nature of valinomycin, it is used in ion-selective electrodes.

References

1- Abdalah, R., Wei, L., Francis, K., et al. Valinomycin-induced apoptosis in Chinese hamster ovary cells. Neurosci Lett 405 68-73 (2006).

2- Turchan, J., Pocernich, C.B., Gairola, C., et al. Oxidative stress in HIV demented patients and protection ex vivo with novel antioxidants. Neurology 60 307-314 (2003).

Ordering information

<u>Catalog size quantities and prices may be found at www.interchim.com/</u> Please inquire for higher quantities (availability, shipment conditions).

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