

## Catalog # 10-2112 Valinomycin

CAS# 2001-95-8 Cyclo(L-Val-D-Hylva-D-Val-L-Lac-)<sub>3</sub> Lot # X101732

Valinomycin is a selective K+ ionophore capable of transporting potassium ions through lipid membranes.1 It can induce apoptosis in cells by causing a rapid loss of mitochondrial membrane potential via potassium efflux.<sup>2,3</sup>

- 1) Pressman, (1976) Biological applications of ionophores; Annu.Rev.Biochem. 45 501
- 2) Furlong et al., (1998) Induction of apoptosis by valinomycin: mitochondrial permeability transition causes intracellular acidification Cell Death Diff. **5** 214
- 3) Inai et al. (1997) Valinomycin induces apoptosis of ascites hepatoma cells (AH-130) in relation to mitochondrial membrane potential; Cell Struc.Funct. **22** 555

## **PHYSICAL DATA**

 $\begin{array}{lll} \mbox{Molecular Weight:} & 1111.32 \\ \mbox{Molecular Formula:} & C_{54}H_{90}N_6O_{18} \\ \mbox{Purity:} & >98\% \ \mbox{by TLC} \end{array}$ 

NMR: (Conforms)

Solubility: DMSO (up to 10 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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