



LKT Laboratories, Inc.

Valinomycin

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Product Information

Product ID V0145

CAS No. 2001-95-8

Chemical Name

Synonym Valinomycin

Formula $C_{54}H_{90}N_6O_{18}$

Formula Wt. 1111.32

Melting Point 190°C

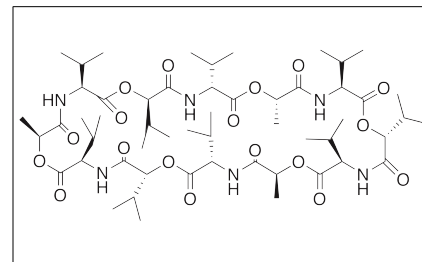
Purity ≥98%

Solubility Insoluble in water. Soluble in ether, benzene, chloroform and acetone.

Store Temp -20°C

Ship Temp Ambient

Description Valinomycin is a peptide antibiotic originally produced by *Streptomyces*. Valinomycin displays antibacterial efficacy by inhibiting growth of *Streptomyces* and *Clostridium*. Valinomycin is a neutral ionophore that transports K⁺ ions through cellular membranes, altering the electrochemical gradient. In vitro, valinomycin induces mitochondrial damage, oxidative stress, and caspase expression.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
V0145	5 mg	\$33.10
V0145	10 mg	\$49.70
V0145	25 mg	\$110.30

References Li R, El-Mallahk RS. A novel evidence of different mechanisms of lithium and valproate neuroprotective action on human SY5Y neuroblastoma cells: caspase-3 dependency. *Neurosci Lett*. 2000 Nov 24;294(3):147-50. PMID: 11072136.

Gad SC, Reilly C, Siino K, et al. Thirteen cationic ionophores: their acute toxicity, neurobehavioral and membrane effects. *Drug Chem Toxicol*. 1985;8(6):451-68. PMID: 4092618.

Seshachalam D, Frahm DH, Ferraro FM. Cation reversal of inhibition of growth by valinomycin in *Streptococcus pyogenes* and *Clostridium sporogenes*. *Antimicrob Agents Chemother*. 1973 Jan;3(1):63-7. PMID: 4208280.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.