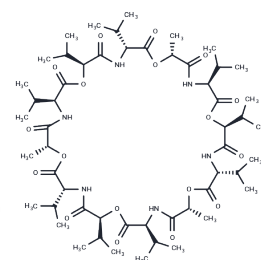


## Valinomycin

## Chemical Properties

CAS No. :	2001-95-8
Formula:	C <sub>54</sub> H <sub>90</sub> N <sub>6</sub> O <sub>18</sub>
Molecular Weight:	1111.32
Storage:	Keep away from moisture, Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



## Biological Description

Description	Valinomycin (NSC-122023) is a cyclic depsipeptide antibiotic and a potassium-specific ionophore. Valinomycin induces PINK1 activation and promotes Parkin phosphorylation at Ser65.
Targets(IC50)	Apoptosis, PTEN, Antibacterial, Antibiotic, Autophagy, Antifungal
In vivo	Valinomycin is irritating in contact with eyes and skin. Inhalation of Valinomycin can cause respiratory disturbances and even loss of consciousness. The median lethal dose (LD50) of Valinomycin in mice and rabbits was 2.5 mg/kg and 5 mg/kg, respectively. Valinomycin also has various chronic effects, including central and peripheral nervous system damage, eye damage, lens damage, and corneal damage [3].

## Solubility Information

Solubility	Ethanol: 40 mg/mL (35.99 mM), Sonication is recommended. DMSO: 20 mg/mL (18 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (1.8 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.8998 mL	4.4992 mL	8.9983 mL
5 mM	0.180 mL	0.8998 mL	1.7997 mL
10 mM	0.090 mL	0.4499 mL	0.8998 mL
50 mM	0.018 mL	0.090 mL	0.180 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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