Valinomycin

Catalog No.C18495 Batch:C1849503

Product Datasheet

Technical Data

Formula	$C_{54}H_{90}N_6O_{18}$		
Molecular Weight	1111.32	**CAS No.**	2001-95-8
Solubility (25°C)*	In vitro	DMSO	100 mg/mL (89.98 mM)
		Ethanol	100 mg/mL (89.98 mM)
		Water	Insoluble

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

Preparing Stock Solutions

Biological Activity

Description	valinomycin (NSC 122023) is a potassium-specific ionophore that selectively complexes with K^+ ions and integrates into biological bilayer membranes via its hydrophobic exterior, disrupting the normal K^+ gradient. This disruption leads to membrane depolarization and subsequent cell death, while encapsulation in liposomes can reduce its cytotoxicity and improve targeting precision.
In vivo	Lipo-Valinomycin (1-40 μg/g, i.v., every 2 days for 16 d) inhibits HepG2 tumor growth in nude mice.

References

https://pubmed.ncbi.nlm.nih.gov/33917912/

https://pubmed.ncbi.nlm.nih.gov/31742409/

RETURN POLICY

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

SHIPPING & STORAGE

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

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