

Certificate of Analysis

Catalog Number	BP22567
Product Name	Concanamycin A

Physical and Chemical Properties

Synonyms	Antibiotic X 4357B; Folimycin; X 4357B
CAS No.	80890-47-7
Chemical Formula	C46H75NO14
Molecular Weight	866.09
	DMSO: ≥ 33 mg/mL (31.19 mM)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	Concanamycin A (Folimycin; Antibiotic X 4357B) is a macrolide antibiotic, a vacuolar type H+-ATPase (V-ATPase) inhibitor. Concanamycin A is also an inhibitor of lysosomal acidification, can be used to T cell-mediated inflammation research
In vitro	Concanamycin A can come from S. diastatochromogenes 545, as a microbial metabolite with immunomodulatory activity. Concanamycin A (100 nM; 0-20 h) results DNA fragmentation in CD4+ and selectively induces CD8+ T cells rapid cell death between normal and the immunized mice source, while CD8+ population in mice immunized is more sensitive. Concanamycin A (3-50 nM; 16 h) inhibits LPS-induced NO production in elicited peritoneal macrophages, but (25 nM; 7 h) doesn't inhibit LPS-induced TNF- α production. Concanamycin A (0.01 nM-1 nM) inhibits the acidification of rat liver lysosomes (IC50 =0.061 nM), and inhibits oleate incorporation into cholesteryl ester (IC50 =14 nM).
In vivo	Concanamycin A (15 mg/kg; i.v.; 0, 10 or 24 h prior to sacrifice) induced T cell-mediated hepatitis in mice.

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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