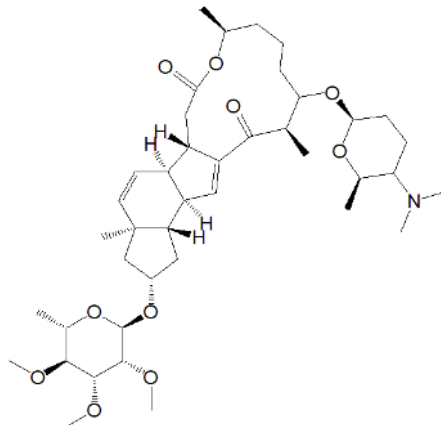


## Certificate of Analysis



<b>PRODUCT</b>	<b><i>Spinosyn A</i></b>
<b>BATCH #</b>	PA-045-130-140
<b>ASSAY METHOD</b>	HPLC
<b>REPORT DATE</b>	2022-06-23
<b>CHEMICAL NAME</b>	(1S,2R,5S,7R,9R,10S,14R,15S,19S)-15-[(2R,5S,6R)-5-(dimethylamino)-6-methyloxan-2-yl]oxy-19-ethyl-14-methyl-7-[(2R,3R,4R,5S,6S)-3,4,5-trimethoxy-6-methyloxan-2-yl]oxy-20-oxatetracyclo[10.10.0.02,10.05,9]docosa-3,11-diene-13,21-dione
<b>SMILES STRUCTURE</b>	CCC1CCCC(C(C(=O)C2=CC3C4CC(CC4C=CC3C2CC(=O)O1)OC5C(C(C(C(O5)C)OC)OC)OC)OC6CCC(C(O6)C)N(C)C
<b>OTHER NAMES</b>	N/A
<b>CHEMICAL FORMULA</b>	C <sub>41</sub> H <sub>65</sub> NO <sub>10</sub>
<b>MOLECULAR WEIGHT</b>	732.0 g/mol
<b>CAS REG. #</b>	131929-60-7
<b>STORAGE</b>	< -20 degrees C; in dark
<b>EXPIRATION DATE</b>	2025-06-29
<b>NOTES</b>	N/A

### Analytical Data

TEST	METHOD	SPECIFICATION	RESULT
HPLC	250 nm	>95%	97.0%
Appearance	Crystalline, white		
Mass (g)	406.3		

 Signed: Jan Glinski, Ph.D.  
 Planta Analytica, LLC  
 6/23/2022

