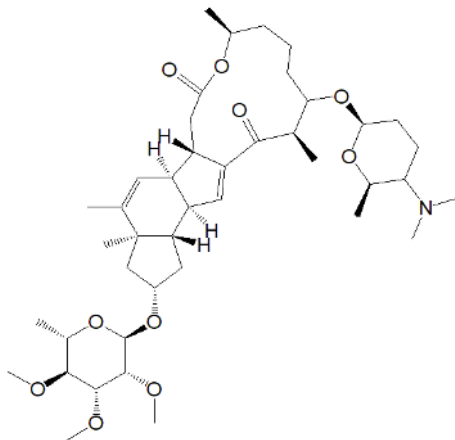


Certificate of Analysis



| | |
|-------------------------|--|
| PRODUCT | Spinosyn D |
| BATCH # | PA-045-130-240 |
| ASSAY METHOD | HPLC |
| REPORT DATE | 2022-06-23 |
| CHEMICAL NAME | (1S,2S,5R,7S,9S,10S,14R,15S,19S)-15-[(2R,5S,6R)-5-(dimethylamino)-6-methyloxan-2-yl]oxy-19-ethyl-4,14-dimethyl-7-[(2R,3R,4R,5S,6S)-3,4,5-trimethoxy-6-methyloxan-2-yl]oxy-20-oxatetracyclo[10.10.0.0.2,10.05,9]docosa-3,11-diene-13,21-dione |
| SMILES STRUCTURE | CCC1CCCC(C(C(=O)C2=CC3C4CC(CC4C(=CC3C2CC(=O)O1)C)OC5C(C(C(C(O5)C)OC)OC)OC)C)OC6CCC(C(O6)C)N(C)C |
| OTHER NAMES | N/A |
| CHEMICAL FORMULA | C ₄₂ H ₆₇ NO ₁₀ |
| MOLECULAR WEIGHT | 746.0 g/mol |
| CAS REG. # | 131929-63-0 |
| STORAGE | < -20 degrees C; in dark |
| EXPIRATION DATE | 2025-06-29 |
| NOTES | N/A |

Analytical Data

| TEST | METHOD | SPECIFICATION | RESULT |
|------------|--------------------|---------------|--------|
| HPLC | 250 nm | >95% | 95.2% |
| Appearance | Crystalline, white | | |
| Mass (g) | 100.4 | | |

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

