



Product Information

Antifection inhibitor Midecamycin, Purity $\geq 98\%$

Cat. No.: X24-07-ZQ110

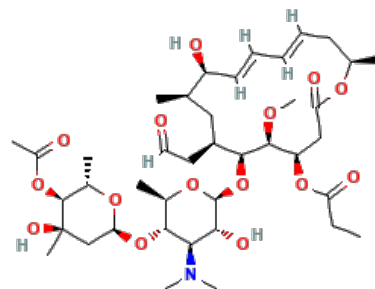
Size: 50 mg; 100 mg; 200 mg; 500 mg

CAS Number: 35457-80-8

Compound CID: 5282169

Synonym: 35457-80-8; Antifection inhibitor; Midecamycin; SF 837; SF-837; SF837

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	Midecamycin, soluble in DMSO and ethanol and insoluble in water, has strong immunosuppressant properties. It targets Macrolide.
Molecular Weight	813.98
Molecular Formula	C ₄₁ H ₆₇ NO ₁₅
Targets	Macrolide
IUPAC Name	[(4R,5S,6S,7R,9R,10R,11E,13E,16R)-6-[(2S,3R,4R,5S,6R)-4-(dimethylamino)-3-hydroxy-5-[(2S,4R,5S,6S)-4-hydroxy-4,6-dimethyl-5-propanoyloxyoxan-2-yl]oxy-6-methyloxan-2-yl]oxy-10-hydroxy-5-methoxy-9,16-dimethyl-2-oxo-7-(2-oxoethyl)-1-oxacyclohexadeca-11,13-dien-4-yl] propanoate
InChI	InChI=1S/C41H67NO15/c1-11-30(45)54-29-21-32(47)51-24(4)16-14-13-15-17-28(44)23(3)20-27(18-19-43)37(38(29)50-10)57-40-35(48)34(42(8)9)36(25(5)53-40)56-33-22-41(7,49)39(26(6)52-33)55-31(46)12-2/h13-15,17,19,23-29,33-40,44,48-49H,11-12,16,18,20-22H2,1-10H3/b14-13+,17-15+/t23-,24-,25-,26+,27+,28+,29-,33+,34-,35-,36-,37+,38+,39+,40+,41-/m1/s1
InChI Key	DMUAPQTXSSNEDD-QALJCMCCSA-N
Canonical SMILES	CCC(=O)OC1CC(=O)OC(CC=CC=CC(C(CC(C1OC)OC2C(C(C(C(O2)C)OC3CC(C(C(O3)C)OC(=O)CC)(C)O)N(C)C)O)CC=O)C)O)C
Isomeric SMILES	CCC(=O)O[C@@H]1CC(=O)O[C@@H](C/C=C/C/[C@@H]([C@@H][C@H]([C@@H]([C@@H]1OC)O[C@H]2[C@@H]([C@H]([C@@H]([C@H](O2)C)O[C@H]3C[C@@]([C@H]([C@@H](O3)C)OC(=O)CC)(C)O)N(C)C)O)CC=O)C)O)C
Form	Lyophilized powder
Purity	$\geq 98\%$



Solubility	DMSO: 98 mg/mL (120.39 mM); Water: Insoluble; Ethanol: 98 mg/mL (120.39 mM)
Identity	Confirmed by NMR/HPLC/MS.
Stability	The product is stable for three years when stored at the recommended temperature in lyophilized powder.
Quality Level	Research grade
Applications	Midecamycin is applied in studies of bacterial protein synthesis inhibition, functioning as a macrolide antibiotic.
Storage	Store at -20°C, and keep desiccated.