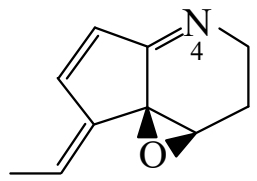
>>**Entry Name: Abikoviromycin**
Synonym(s): 7-Ethylidene-1*a*,2,3,7-tetrahydrocyclopent[*b*]oxireno[*c*]pyridine, 9Cl, 8Cl. Latumcidin. Virocidin. SF 973A. Antibiotic SF 973A. Thomsomycin



CAS Registry Number: 31774-33-1

Molecular Formula: $C_{10}H_{11}NO$
Molecular Weight: 161.203
Accurate Mass: 161.084064
Percentage Composition: C 74.51%; H 6.88%; N 8.69%; O 9.93%
Biological Source: Isol. from *Streptomyces abikoensis, Streptomyces rubescens* and *Streptomyces latumcidicus*
Use/Importance: Weak antibacterial and antifungal antibiotic. Antiviral agent
Physical Description: Highly unstable, polymerising on isol. from broth cultures. Can be handled in dilute soln.
Optical Rotation: $[\alpha]_D^{21}$+148.9 (c, 1 in 0.1*N* NaOH)
UV: [acid] λ_{max} 238 (ε 9980); 338 (ε 11600) (0.1*N* HCl) (Derep) [base] λ_{max} 245 (ε 8690); 290 (ε 7730) (0.1*N* NaOH) (Derep) [neutral] λ_{max} 243 (ε 9000); 289 (sh) (ε 8710); 345 (sh) (ε 4000) (EtOH or pH 7) (Derep) [neutral] λ_{max} 244 (ε 13900) (MeOH) (Derep)

>>**Derivative:** Sulfate

CAS Registry Number: 43043-59-0
Physical Description: Cryst.
Melting Point: Mp 140-141 dec.°
Optical Rotation: $[\alpha]_D^{25}$+24 (c, 1 in H_2O)

>>**Derivative:** Picrate

Physical Description: Yellow needles (EtOAc/MeOH)
Melting Point: Mp 136-137°

>>**Derivative:** 4,4*a*-Dihydro
Synonym(s): Dihydrolatumcidin. SF 973B. Antibiotic SF 973B

CAS Registry Number: 20421-29-8

Molecular Formula: $C_{10}H_{13}NO$
Molecular Weight: 163.219
Accurate Mass: 163.099714
Percentage Composition: C 73.59%; H 8.03%; N 8.58%; O 9.80%
Biological Source: Isol. from *Streptomyces olivaceus*
Melting Point: Mp 60-61° (57-59°)
Optical Rotation: $[\alpha]_D^{22}$+276 (c, 1 in MeOH)
pKa Value: pK_a 8.07
UV: [neutral] λ_{max} 244 (E1%/1cm 850) (MeOH) (Berdy)

>>**Derivative:** Dihydro; hydrochloride

Melting Point: Mp 130-132°

>>**Derivative:** 4,4*a*-Dihydro, 4-hydroxy
Synonym(s): Dihydro-*N*-hydroxyabikoviromycin. *N*-Hydroxydihydroabikoviromycin

CAS Registry Number: 109292-19-5

Molecular Formula: $C_{10}H_{13}NO_2$
Molecular Weight: 179.218
Accurate Mass: 179.094629
Percentage Composition: C 67.02%; H 7.31%; N 7.82%; O 17.85%
Biological Source: From *Streptomyces* sp. SANK 65986
Use/Importance: Exhibits antimicrobial activity
Solubility: BERDY SOL: Sol. MeOH, $CHCl_3$; poorly sol. H_2O, hexane
UV: [neutral] λ_{max} 210 (); 242 () (MeOH) (Berdy) [acid] λ_{max} 243 () (MeOH-HCl) (Berdy) [base] λ_{max} 210 (); 242 () (MeOH-NAOH) (Berdy)
Hazard & Toxicity: BERDY HAZD : LD_{50} (mus, ivn) 100 - 200 mg/kg