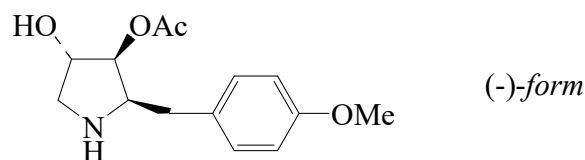




>>Entry Name: Anisomycin

Synonym(s): 2-(4-Methoxyphenylmethyl)-3,4-pyrrolidinediol 3-acetate, 9Cl. Flagecidin. PA 106. SA 3097C₁. Antibiotic SA 3097C₁. Antibiotic PA 106. Anhydroscopin A. NSC 76712



Molecular Formula: C₁₄H₁₉NO₄

Molecular Weight: 265.308

Accurate Mass: 265.131409

Percentage Composition: C 63.38%; H 7.22%; N 5.28%; O 24.12%

Calculated Log P Data: Log P 1.13 (calc)

UV: [acid] λ_{max} (no shifts reported) (Derep) [base] λ_{max} (no shifts reported) (Derep) [neutral] λ_{max} 223 (ε 10900); 276 (ε 1790); 283 (ε 1550) (MeOH) (Derep)

Fluka: 10522

Sigma: A1899

>>Variant: (-)-form

CAS Registry Number: 22862-76-6

Molecular Formula: C₁₄H₁₉NO₄

Molecular Weight: 265.308

Accurate Mass: 265.131409

Percentage Composition: C 63.38%; H 7.22%; N 5.28%; O 24.12%

Biological Source: Isol. from *Streptomyces griseolus*, *Streptomyces anhydroscopicus* and *Streptomyces roseochromogenes*

Biological Use/Importance: Antibiotic and antifungal agent. Protein synthesis inhibitor. Has been used to induce amnesia in animal models

Physical Description: Long needles (EtOAc, H₂O or toluene)

Melting Point: Mp 141.6-142.2°

Optical Rotation: [α]_D²³ -30 (c, 1 in MeOH). [α]_D -44.6 (CHCl₃)

pKa Value: pK_a 7.9

Other Data: Pharmacol. active isomer

Hazard & Toxicity: LD₅₀ (rat, orl) 72 mg/kg. LD₅₀ (rat, ipr) 345 mg/kg

>>Derivative: Hydrochloride

Physical Description: Cryst. (EtOAc/EtOH)

Melting Point: Mp 187-188°

>>Derivative: O-De-Ac

Synonym(s): Deacetylanisomycin. **Antibiotic SA 3097D₁**. SA 3097D₁

CAS Registry Number: 27958-06-1

Molecular Formula: C₁₂H₁₇NO₃

Molecular Weight: 223.271

Accurate Mass: 223.120844

Percentage Composition: C 64.55%; H 7.67%; N 6.27%; O 21.50%

Biological Source: Prod. by *Streptomyces* sp. SA3097

Solubility: BERDY SOL: Sol. MeOH, H₂O

UV: [acid] λ_{max} (no shifts reported) (Derep) [base] λ_{max} (no shifts reported) (Derep) [neutral] λ_{max} 223 (ε 11000); 276 (ε 1100); 282 (sh) (ε 1000) (MeOH) (Derep)

[neutral] λ_{max} 225 (); 277 () (MeOH) (Berdy)

Sigma: D4406