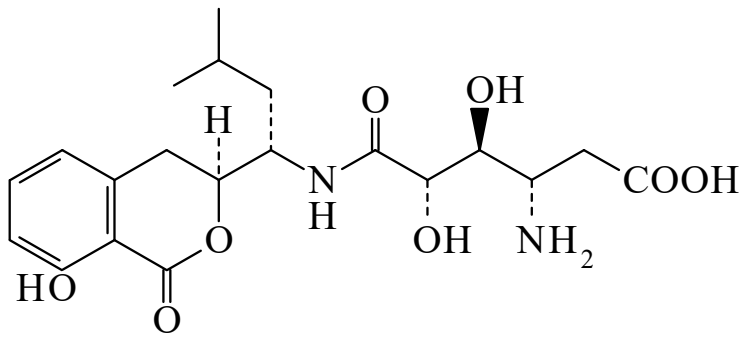
>>**Entry Name: Amicoumacin B**
Synonym(s): AI 77B. BN 103B. Antibiotic AI 77B. Antibiotic BN 103B



CAS Registry Number: 82768-33-0
Related CAS Registry Numbers(s): 77674-99-8

Molecular Formula: $C_{20}H_{28}N_2O_8$
Molecular Weight: 424.45
Accurate Mass: 424.184568
Percentage Composition: C 56.60%; H 6.65%; N 6.60%; O 30.16%
General Statement: Oligopeptide antibiotic
Biological Source: Prod. by *Bacillus pumilus*
Biological Use/Importance: Shows weak antibacterial activity and antiulcer props.
Physical Description: Cryst. + H_2O
Melting Point: Mp 137-145 dec.°
Optical Rotation: $[\alpha]_D^{23}$–106.1 (c, 0.5 in MeOH)
UV: [neutral] λ_{max} 213 (); 247 (); 315 () (MeOH)

>>**Derivative:** Amide
Synonym(s): Amicoumacin A

CAS Registry Number: 78654-44-1

Molecular Formula: $C_{20}H_{29}N_3O_7$
Molecular Weight: 423.465
Accurate Mass: 423.200552
Percentage Composition: C 56.73%; H 6.90%; N 9.92%; O 26.45%
Biological Source: Prod. by *Bacillus pumilus*
Biological Use/Importance: Shows antibacterial, antiinflammatory and antiulcer props. Acts as an acaricide
Physical Description: Powder (as hydrochloride)
Melting Point: Mp 132-135 dec.° (hydrochloride)
Optical Rotation: $[\alpha]_D^{23}$–97.2 (c, 1.0 in MeOH) (hydrochloride)
Solubility: BERDY SOL: Sol. H_2O, EtOH, Py, MeOH; fairly sol. Me_2CO; poorly sol. C_6H_6, hexane, $CHCl_3$, EtOAc
UV: [base] λ_{max} 298 (ε); 348 (ε) (0.1*N* NaOH) (Derep) [neutral] λ_{max} 216 (ε 29000); 245 (ε 6050); 314 (ε 4900) (MeOH) (Derep) [neutral] λ_{max} 208 (); 247 (); 315 () (MeOH) [neutral] λ_{max} 208 (ε 27300); 247 (ε 6400); 315 (ε 4380) (MeOH) (Berdy) [acid] λ_{max} 247 (E1%/1cm 140); 313 (E1%/1cm 85) (HCl) (Berdy) [base] λ_{max} 245 (E1%/1cm 296); 296 (E1%/1cm 52); 345 (E1%/1cm 106) (NAOH) (Berdy)
Hazard & Toxicity: BERDY HAZD : LD_{50} (mus, ivn) 25 - 75 mg/kg , LD_{50} (mus, orl) 132 mg/kg

>>**Derivative:** Amide, *N*-Ac

CAS Registry Number: 78654-45-2
Physical Description: Cryst. ($CHCl_3$)
Melting Point: Mp 178-181°
Optical Rotation: $[\alpha]_D^{23}$–79.8 (c, 0.5 in MeOH)

>>**Derivative:** Amide, *N*,*O*,*O*,*O*-tetra-Ac

CAS Registry Number: 78468-39-0
Molecular Formula: $C_{28}H_{37}N_3O_{11}$
Molecular Weight: 591.614
Percentage Composition: C 56.85%; H 6.30%; N 7.10%; O 29.75%
Physical Description: Cryst. (Me_2CO)
Melting Point: Mp 227-229°
Optical Rotation: $[\alpha]_D^{23}$–79 (c, 0.5 in MeOH)

References: