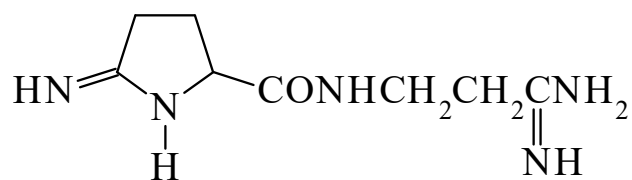




>>Entry Name: Noformicin

Synonym(s): 5-Amino-*N*-(3-amino-3-iminopropyl)-3,4-dihydro-2*H*-pyrrole-2-carboxamide, 9Cl. *N*-(2-Amidinoethyl)-5-imino-2-pyrrolidinecarboxamide, 8Cl. MK 61. Antibiotic MK 61



CAS Registry Number: 155-38-4

Molecular Formula: C₈H₁₅N₅O

Molecular Weight: 197.239

Accurate Mass: 197.12766

Percentage Composition: C 48.72%; H 7.67%; N 35.51%; O 8.11%

>>Variant: (+)-form

Molecular Formula: C₈H₁₅N₅O

Molecular Weight: 197.239

Accurate Mass: 197.12766

Percentage Composition: C 48.72%; H 7.67%; N 35.51%; O 8.11%

Biological Source: Produced by *Nocardia formica*

Use/Importance: Shows antiviral and antibacterial props.

Solubility: BERDY SOL: Sol. MeOH, H₂O; poorly sol. Me₂CO, hexane

pKa Value: p*K*_a 9.4 (25°, H₂O)

UV: [neutral] λ_{max} (H₂O) (Berdy)

Hazard & Toxicity: Toxic, LD₅₀ 5 mg/kg (i.v.) ; BERDY HAZD : LD₅₀ (mus, ivn) 5 mg/kg , LD₅₀ (mus, scu) 10 mg/kg

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 42373-21-7

Physical Description: Cryst. (MeOH)

Melting Point: Mp 265 dec.°

Optical Rotation: [α]_D²⁵ +7 (c, 1 in H₂O). [α]_D²⁵ +8.8 (c, 1 in MeOH)

Solubility: Sol. H₂O

>>Variant: (±)-form

Molecular Formula: C₈H₁₅N₅O

Molecular Weight: 197.239

Accurate Mass: 197.12766

Percentage Composition: C 48.72%; H 7.67%; N 35.51%; O 8.11%

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 42373-18-2

Melting Point: Mp 253-254°

References:

Harris, D.A. *et al.*, *Antibiot. Annu.*, 1953, 609, (*isol*)

Gray, R.A., *Phytochemistry*, 1955, **45**, 281, (*isol*)

Diana, G.D., *J. Med. Chem.*, 1973, **16**, 857, (*synth*)