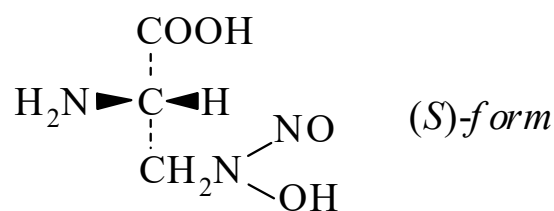




>>Entry Name: Alanosine, INN

Synonym(s): 3-(Hydroxynitrosoamino)alanine, 9Cl. 2-Amino-3-(*N*-hydroxy-*N*-nitrosoamino)propionic acid. NSC 143647



CAS Registry Number: 16931-22-9

Molecular Formula: C₃H₇N₃O₄

Molecular Weight: 149.106

Accurate Mass: 149.043657

Percentage Composition: C 24.17%; H 4.73%; N 28.18%; O 42.92%

General Statement: Amino acid antibiotic

Use/Importance: Possesses antiviral and antineoplastic activity. Insect ecdysis inhibitor

UV: [acid] λ_{max} 228 (ε 7520) (0.1*N* HCl) (Derep) [base] λ_{max} 249 (ε 9390) (0.1*N* NaOH) (Derep) [neutral] λ_{max} 249 (ε 9390) (pH 7 phosphate buffer) (Derep)

>>Variant: (*S*)-form

Synonym(s): L-form. DL 435. NSC 15353

CAS Registry Number: 5854-93-3

Molecular Formula: C₃H₇N₃O₄

Molecular Weight: 149.106

Accurate Mass: 149.043657

Percentage Composition: C 24.17%; H 4.73%; N 28.18%; O 42.92%

Biological Source: Isol. from *Streptomyces alanosinicus*

Physical Description: Cryst.

Melting Point: Mp 190°

Optical Rotation: [α]_D²⁵ −37.8 (c, 0.5 in H₂O)

Solubility: BERDY SOL: Sol. acids, bases; poorly sol. MeOH, hexane

UV: [neutral] λ_{max} 250 (E1%/1cm 630) (H₂O) (Berdy) [base] λ_{max} 250 (E1%/1cm 630) (NaOH) (Berdy) [acid] λ_{max} 228 (E1%/1cm 505) (HCl) (Berdy)

Other Data: Pharmacol. active isomer

Hazard & Toxicity: LD₅₀ (mus, scu) 845 mg/kg ; BERDY HAZD : LD₅₀ (mus, ipr) 600 mg/kg , LD₅₀ (mus, ivn) 300 mg/kg

>>Variant: (±)-form

CAS Registry Number: 5854-95-5

Molecular Formula: C₃H₇N₃O₄

Molecular Weight: 149.106

Accurate Mass: 149.043657

Percentage Composition: C 24.17%; H 4.73%; N 28.18%; O 42.92%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 190 dec.°

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