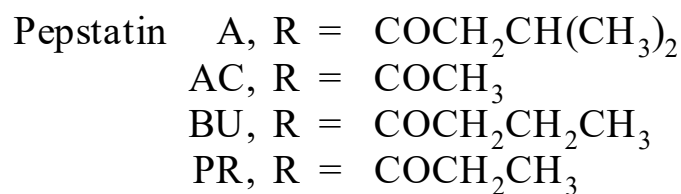




>>Entry Name: Pepstatins



>>Variant: Pepstatin A, 9CI

Synonym(s): Pepstatin, INN, USAN. Ahpatinin C. Pepsin inhibitor S 735A. Procidin S 735A

CAS Registry Number: 26305-03-3

Molecular Formula: $\text{C}_{34}\text{H}_{63}\text{N}_5\text{O}_9$

Molecular Weight: 685.9

Accurate Mass: 685.46258

Percentage Composition: C 59.54%; H 9.26%; N 10.21%; O 20.99%

Biological Source: From *Streptomyces testaceus*, *Streptomyces procidinanus* and *Streptomyces* sp. WK 142

Use/Importance: Pepsin inhibitor. Inhibits HIV-1 protease activity. Antineoplastic

Development Status: Never marketed

Melting Point: Mp 228-229°

UV: [neutral] λ_{max} 0 (end) (ϵ) (MeOH) (Derep)

Other Data: WK 142 also prod. Ahpatinin D, which has same gross struct.

Hazard & Toxicity: LD₅₀ (rat, ipr) 875 mg/kg. LD₅₀ (rat, orl) >2000 mg/kg

Aldrich: 36032-5

Fluka: 77170

Sigma: P2442

>>Derivative: Me ester

Synonym(s): Procidin S 735M. Pepsin inhibitor S 735M

CAS Registry Number: 29169-91-3

Molecular Formula: $\text{C}_{35}\text{H}_{65}\text{N}_5\text{O}_9$

Molecular Weight: 699.927

Accurate Mass: 699.47823

Percentage Composition: C 60.06%; H 9.36%; N 10.01%; O 20.57%

Biological Source: From *Streptomyces procidinanus*

>>Derivative: Hydroxy

Synonym(s): Hydroxypepstatin A. 4-L-Serinepepstatin A

CAS Registry Number: 52329-53-0

Molecular Formula: $\text{C}_{34}\text{H}_{63}\text{N}_5\text{O}_{10}$

Molecular Weight: 701.899

Accurate Mass: 701.457495

Percentage Composition: C 58.18%; H 9.05%; N 9.98%; O 22.79%

Biological Source: From *Streptomyces testaceus*

Physical Description: Cryst.

Melting Point: Mp 232.5-233.5°

Solubility: BERDY SOL: Sol. MeOH, butanol; poorly sol. cyclohexane

UV: [neutral] λ_{max} (MeOH) (Berdy)

Other Data: May contain fatty acid homologues