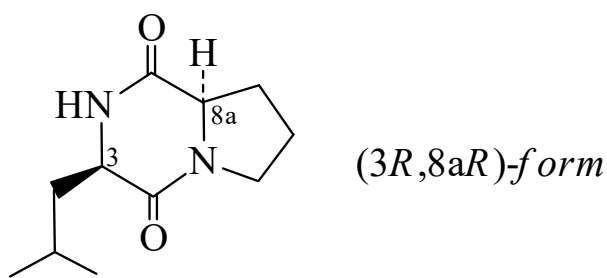




>>Entry Name: Cyclo(leucylprolyl)

ENTRY UNDER REVIEW

Synonym(s): Hexahydro-3-(2-methylpropyl)pyrrolo[1,2*a*]pyrazine-1,4-dione. Prolylleucyldiketopiperazine. Gancidin W



CAS Registry Number: 5654-86-4

Related CAS Registry Numbers(s): 19943-30-7 43041-29-8

Molecular Formula: C₁₁H₁₈N₂O₂

Molecular Weight: 210.275

Accurate Mass: 210.136828

Percentage Composition: C 62.83%; H 8.63%; N 13.32%; O 15.22%

General Statement: Diketopiperazine antibiotic

>>Variant: (3*R*,8*aR*)-form

Synonym(s): D,D-form

Molecular Formula: C₁₁H₁₈N₂O₂

Molecular Weight: 210.275

Accurate Mass: 210.136828

Percentage Composition: C 62.83%; H 8.63%; N 13.32%; O 15.22%

Biological Source: Isol. from the Caribbean sponge *Calyx* cf. *podatypa*

Physical Description: Amorph. solid

>>Variant: (3*R*,8*aS*)-form

CAS Registry Number: 36238-67-2

Molecular Formula: C₁₁H₁₈N₂O₂

Molecular Weight: 210.275

Accurate Mass: 210.136828

Percentage Composition: C 62.83%; H 8.63%; N 13.32%; O 15.22%

Biological Source: Isol. from *Calyx* cf. *podatypa*

Physical Description: Cryst.

Melting Point: Mp 148-149° (119-122°)

Optical Rotation: $[\alpha]_D^{31} -105.5$ (c, 0.5 in EtOH)

Solubility: BERDY SOL: Sol. MeOH, EtOAc

>>Variant: (3*S*,8*aS*)-form

Synonym(s): L,L-form

CAS Registry Number: 2873-36-1

Molecular Formula: C₁₁H₁₈N₂O₂

Molecular Weight: 210.275

Accurate Mass: 210.136828

Percentage Composition: C 62.83%; H 8.63%; N 13.32%; O 15.22%

Biological Source: Prod. by *Streptomyces gancidicus*, *Nocardia restricta*, *Candida albicans*, *Guignardia laricina* and several *Ceratocystis* spp. Also isol. from the sponge *Tedania ignis* and from fungi. Bitter component of sake and contributes to the flavour of beer

Use/Importance: Shows antitumour and antifungal props. Phytotoxin associated with fungal diseases of trees

Physical Description: Cryst.

Melting Point: Mp 168-172° (158-159°)

Optical Rotation: $[\alpha]_D^{25} -133$ (c, 1 in EtOH) (lit. gives a temp. range). $[\alpha]_D^{21} -144$ (c, 0.5 in H₂O)

Hazard & Toxicity: LD₅₀ (mus, ivn) 80 mg/kg

References: