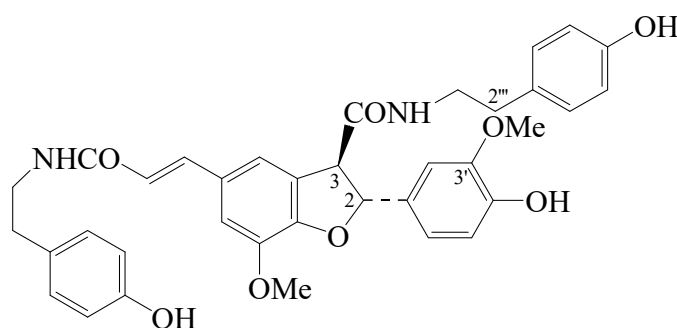




>>Entry Name: Grossamide



CAS Registry Number: 80510-06-1

Molecular Formula: $C_{36}H_{36}N_2O_8$

Molecular Weight: 624.689

Accurate Mass: 624.247168

Percentage Composition: C 69.22%; H 5.81%; N 4.48%; O 20.49%

Biological Source: Isol. from *Cannabis sativa* and *Capsicum annuum* var. *grossum* and *Hibiscus cannabinus*

Use/Importance: Protease inhibitor

Physical Description: Cryst. (MeOH/ $CHCl_3$ /cyclohexane)

Melting Point: Mp 174-175° (133-135°)

>>Derivative: 3'-O-De-Me

Synonym(s): Demethylgrossamide

CAS Registry Number: 170171-94-5

Molecular Formula: $C_{35}H_{34}N_2O_8$

Molecular Weight: 610.662

Accurate Mass: 610.231518

Percentage Composition: C 68.84%; H 5.61%; N 4.59%; O 20.96%

Physical Description: Amorph. powder

>>Derivative: 2-Epimer

Synonym(s): Tribulusamide A

Molecular Formula: $C_{36}H_{36}N_2O_8$

Molecular Weight: 624.689

Accurate Mass: 624.247168

Percentage Composition: C 69.22%; H 5.81%; N 4.48%; O 20.49%

Biological Source: Alkaloid from the fruit of *Tribulus terrestris*

Biological Use/Importance: Hepatoprotective agent

Physical Description: Amorph. solid

Optical Rotation: $[\alpha]_D^{25} -10.9$ (c, 0.1 in MeOH)

UV: [neutral] λ_{max} 220 (log ϵ 4.22); 287 (log ϵ 4.01); 340 (log ϵ 4.07) (MeOH)

>>Derivative: 2-Epimer, 2'''-oxo

Synonym(s): Tribulusamide B

Molecular Formula: $C_{36}H_{34}N_2O_9$

Molecular Weight: 638.673

Accurate Mass: 638.226433

Percentage Composition: C 67.70%; H 5.37%; N 4.39%; O 22.55%

Biological Source: Alkaloid from the fruit of *Tribulus terrestris*

Biological Use/Importance: Hepatoprotective agent

Physical Description: Amorph. solid

Optical Rotation: $[\alpha]_D^{25} -4.9$ (c, 0.2 in MeOH)

UV: [neutral] λ_{max} 220 (log ϵ 4.38); 285 (log ϵ 4.32); 320 (log ϵ 4.18) (MeOH)

References:

- Yoshihara, T. *et al.*, *Agric. Biol. Chem.*, 1981, **45**, 2593; 1983, **47**, 217, (*isol, synth, struct*)
Sakakibara, I. *et al.*, *Phytochemistry*, 1991, **30**, 3013-3016, (*isol*)
Lajide, L. *et al.*, *Phytochemistry*, 1995, **40**, 1105-1112, (*Demethylgrossamide*)
Li, J.-X. *et al.*, *Planta Med.*, 1998, **64**, 628-631, (*Tribulusamides*)
Seca, A.M.L. *et al.*, *Phytochemistry*, 2001, **58**, 1219-1223, (*isol, pmr, cmr*)