

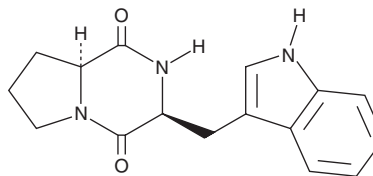
PRODUCT INFORMATION



Brevianamide F

Item No. 23493

CAS Registry No.: 38136-70-8
Formal Name: (3S,8aS)-hexahydro-3-(1H-indol-3-ylmethyl)-pyrrolo[1,2-a]pyrazine-1,4-dione
Synonym: cyclo-(L-Trp-L-Pro), Cyclo-L-tryptophyl-L-proline
MF: C₁₆H₁₇N₃O₂
FW: 283.3
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Brevianamide F is supplied as a crystalline solid. A stock solution may be made by dissolving the breviaamide F in the solvent of choice. Brevianamide F is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of breviaamide F in ethanol is approximately 1 mg/ml and approximately 33 mg/ml in DMSO and DMF.

Brevianamide F is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, breviaamide F should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Brevianamide F has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Brevianamide F is an alkaloid metabolite produced by various *Streptomyces*, *Actinomycetes*, and *Aspergillus* strains that has diverse biological activities.¹⁻³ It inhibits growth of *M. luteus* and *S. aureus* in an inhibitory disc assay when used at a concentration of 30 µg/disc as well as the Bacille Calmette-Guerin *M. bovis* strain (MIC = 12.5 µg/ml).^{2,3} Brevianamide F has antifouling activity, inhibiting attachment of *B. neritina* larvae to PVC plates without inducing lethality (EC₅₀ = 6.35 µg/ml; LC₅₀ = >200 µg/ml in paint used to coat PVC plates).¹

References

1. Zhang, X.-Y., Xu, X.-Y., Peng, J., et al. Antifouling potentials of eight deep-sea-derived fungi from the South China Sea. *J. Ind. Microbiol. Biotechnol.* **41(4)**, 741-748 (2014).
2. Ben Ameer Mehdi, R., Shaaban, K.A., Rebai, I.K., et al. Five naturally bioactive molecules including two rhamnopyranoside derivatives isolated from the *Streptomyces* sp. strain TN58. *Nat. Prod. Res.* **23(12)**, 1095-1107 (2009).
3. Huang, P., Xie, F., Ren, B., et al. Anti-MRSA and anti-TB metabolites from marine-derived *Verrucospora* sp. MS100047. *Appl. Microbiol. Biotechnol.* **100(17)**, 7437-7447 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM