

# PRODUCT INFORMATION



## Geninthiocin A

Item No. 28125

CAS Registry No.: 158792-27-9

Formal Name: L-threonyl-2-[(1Z)-1-amino-1-propen-1-yl]-4-oxazolecarbonyl-2,3-didehydroalanyl-3-methyl-L-threonyl-2-(1-aminoethenyl)-5-methyl-4-oxazolecarbonyl-2,3-didehydroalanyl-6-[2-(1-aminoethenyl)-4-oxazolyl]-5-(4-carboxy-2-thiazolyl)-2-pyridinecarbonyl-2,3-didehydroalanyl-2,3-didehydro-alaninamide (7→1)-lactam

MF:  $C_{50}H_{49}N_{15}O_{15}S$

FW: 1,132.1

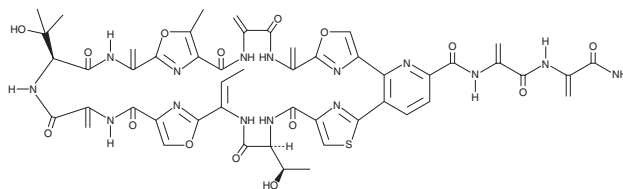
Purity:  $\geq 95\%$

Supplied as: A powder

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years

Item Origin: Bacterium/*Streptomyces* sp.



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

### Laboratory Procedures

Geninthiocin A is supplied as a powder. A stock solution may be made by dissolving the geninthiocin A in the solvent of choice, which should be purged with an inert gas. Geninthiocin A is soluble in DMSO and dimethyl formamide. Geninthiocin A is slightly soluble in ethanol.

### Description

Geninthiocin A is a cyclic thiopeptide bacterial metabolite originally isolated from *Streptomyces* sp. DD84.<sup>1</sup> It is active against a variety of Gram-positive bacteria (MICs = 0.2-4  $\mu\text{g/ml}$ ), the Gram-negative bacterium *C. violaceum* (MIC = 19  $\mu\text{g/ml}$ ), and the fungus *M. hiemalis* (MIC = 38  $\mu\text{g/ml}$ ).<sup>2</sup> Geninthiocin A also induces *tipA* promoter transcription with a minimum induction concentration of 1.2 ng/ml.<sup>1</sup>

### References

1. Yun, B.-S., Hidaka, T., Furihata, K., *et al.* Microbial metabolites with *tipA* promoter inducing activity. II. Geninthiocin, a novel thiopeptide produced by *Streptomyces* sp. DD84. *J. Antibiot. (Tokyo)* **47(9)**, 969-975 (1994).
2. Iniyar, A.M., Sudarman, E., Wink, J., *et al.* Ala-geninthiocin, a new broad spectrum thiopeptide antibiotic, produced by a marine *Streptomyces* sp. ICN19. *J. Antibiot. (Tokyo)* **72(2)**, 99-105 (2019).

#### 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