

PRODUCT INFORMATION



Ternatin

Item No. 20691

CAS Registry No.: 148619-41-4
Formal Name: cyclo[N-methyl-L-alanyl-N-methyl-D-alanyl-(3R)-3-hydroxy-D-leucyl-D-alloisoleucyl-N-methyl-L-alanyl-N-methyl-L-leucyl-L-leucyl]
Synonyms: 1,4,7,10,13,16,19-Heptaazacycloheptacosane, (-)-Ternatin

MF: C₃₇H₆₇N₇O₈

FW: 738.0

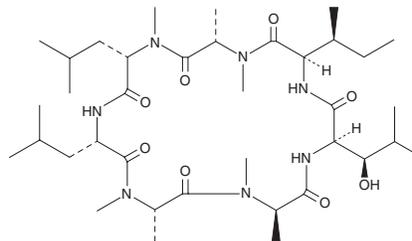
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Fungus/Unidentified sp.



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

Laboratory Procedures

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

Description

Ternatin is a cyclic heptapeptide first isolated from the mushroom *C. versicolor* that has been shown to have cytotoxic and anti-adipogenic effects *in vitro*.¹ It inhibits adipogenesis with an IC₅₀ value of 27 nM and becomes cytotoxic to 3T3-L1 mouse adipocytes at 10-fold higher concentrations.¹ Ternatin is reported to inhibit HCT116 cell proliferation with an IC₅₀ value of 71 nM.² Note that this metabolite should not be confused with the plant flavonoid of the same name.

References

1. Shimokawa, K., Iwase, Y., Yamada, K., *et al.* Synthesis and inhibitory effect on fat accumulation of (-)-ternatin derivatives modified in the β-OH-D-Leu7 moiety. *Org. Biomol. Chem.* **6(1)**, 58-60 (2008).
2. Carelli, J. D., Sethofer, S. G., Smith, G. A., *et al.* Ternatin and improved synthetic variants kill cancer cells by targeting the elongation factor-1_A ternary complex. *eLife* **4**, e10222 (2015).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 08/09/2023

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