

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-Heptaazacycloheneicosane, (-)-Ternatin

MF: $C_{37}H_{67}N_7O_8$

FW: 738.0

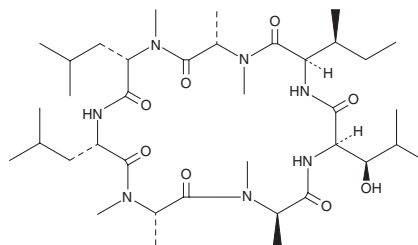
Purity: $\geq 98\%$

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 IC_{50} 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 IC_{50} 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- $_{1A}$ 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.

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