PRODUCT INFORMATION



Swinholide A

Item No. 19611

CAS Registry No.: 95927-67-6

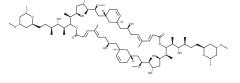
Formal Name: (1R,3S,5E,7E,11S,12S,13R,15S,16S,17S,19S,

> 23R,25S,27E,29E,33S,34S,35R,37S,38S,39S ,41S)-3,13,15,25,35,37-hexahydroxy-11,33bis[(1S,2S,3S)-2-hydroxy-1,3-dimethyl-5-[(2S,4R,6S)-tetrahydro-4-methoxy-6-methyl-2H-pyran-2-yl]pentyl]-17,39-dimethoxy-6,12,16,28,34,38-hexamethyl-10,32,45,46tetraoxatricyclo[39.3.1.1^{19,23}]hexatetraconta-

5,7,21,27,29,43-hexaene-9,31-dione

 $C_{78}H_{132}O_{20}$ 1,389.9 MF: FW: ≥97% **Purity:** Supplied as: An oil Storage: -20°C Stability: ≥4 years

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



Laboratory Procedures

Swinholide A is supplied as an oil. A stock solution may be made by dissolving the swinholide A in the solvent of choice. Swinholide A is soluble in organic solvents such as ethanol, methanol, and DMSO.

Description

Swinholide A is a natural dimeric dilactone macrolide toxin that causes actin depolymerization in cells. 1,2 It stabilizes actin dimers and also binds to and severs F-actin filaments.^{1,3} Swinholide A binds to G-actin in a 1:2 molar ratio and decreases the rate of nucleotide exchange in G-actin.²

References

- 1. Bubb, M.R., Spector, I., Bershadsky, A.D., et al. Swinholide A is a microfilament disrupting marine toxin that stabilizes actin dimers and severs actin filaments. J. Biol. Chem. 270(8), 3463-3466 (1995).
- Saito, S., Watabem, S., Ozaki, H., et al. Actin-depolymerizing effect of dimeric macrolides, bistheonellide A and swinholide A. J. Biochem. 123(4), 571-578 (1998).
- 3. Terry, D.R., Higa, T., and Bubb, M.R. Misakinolide A is a marine macrolide that caps but does not sever filamentous actin. J. Biol. Chem. 272(12), 7841-7845 (1997).

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

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.

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, 12/14/2022

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