

PRODUCT INFORMATION



Anhydroepiophiobolin A

Item No. 28026

CAS Registry No.: 90411-20-4
Formal Name: (2'S,3'S,3aR,5'R,6aR,9aS,10aR)-2,3a,4,4',5',6a,7,9a,10,10a-decahydro-3',9,10a-trimethyl-5'-(2-methyl-1-propen-1-yl)-7-oxo-spiro[dicyclopenta[a,d]cyclooctene-3(1H),2'(3'H)-furan]-6-carboxaldehyde

Synonym: 3-Anhydro-6-*epi*-phiobolin A

MF: C₂₅H₃₄O₃

FW: 382.5

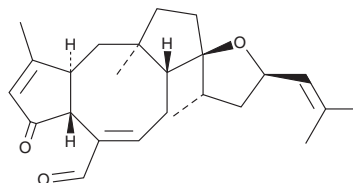
Purity: ≥85%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Fungus/*Bipolaris* sp.



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

Laboratory Procedures

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

Description

Anhydroepiophiobolin A is a sesterterpenoid fungal metabolite that has been found in *B. oryzae*.^{1,2} It is cytotoxic to HepG2 and K562 cells (IC₅₀s = 47.1 and 35.6 μM, respectively) as well as A549, SKOV3, SK-MEL-2, XF498, and HCT15 cells (IC₅₀s = 1.6-1.9 μg/ml).^{1,3} Anhydroepiophiobolin A is phytotoxic to *S. viridis* and *D. erucoides* in a leaf puncture assay.²

References

1. Wang, Q.-X., Yang, J.-L., Qi, Q.-Y., et al. 3-Anhydro-6-hydroxy-phiobolin A, a new sesterterpene inhibiting the growth of methicillin-resistant *Staphylococcus aureus* and inducing the cell death by apoptosis on K562, from the phytopathogenic fungus *Bipolaris oryzae*. *Bioorg. Med. Chem. Lett.* **23(12)**, 3547-3550 (2013).
2. Evidenté, A., Andolfi, A., Cimmino, A. et al. Herbicidal potential of ophiobolins produced by *Drechslera gigantea*. *J. Agric. Food Chem.* **54(5)**, 1779-1783 (2006).
3. Ahn, J.-W., Lee, M.K., Choi, S.-U., et al. Cytotoxic ophiobolins produced by *Bipolaris* sp. *J. Microbiol. Biotechnol.* **8(4)**, 406-408 (1998).

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