

PRODUCT INFORMATION



Ophiobolin C

Item No. 20186

CAS Registry No.: 19022-51-6
Formal Name: (1R,3aS,6aS,7R,9aR,10aS)-7-[(1S)-1,5-dimethyl-4-hexen-1-yl]-1,2,3,3a,6,6a,7,8,9,9a,10,10a-dodecahydro-1-hydroxy-1,9a-dimethyl-3-oxo-dicyclopenta[a,d]cyclooctene-4-carboxaldehyde

MF: $C_{25}H_{38}O_3$

FW: 386.6

Purity: $\geq 85\%$

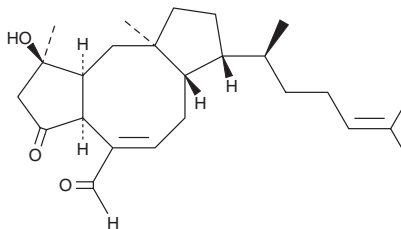
UV/Vis.: λ_{\max} : 238 nm

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

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

Description

Ophiobolin C is a sesterterpenoid fungal phytoxin produced by many species of the genus *Bipolaris*. It has been identified as an antagonist of chemokine receptor CCR5 binding ($\text{IC}_{50} = 40 \mu\text{M}$) to the envelope protein gp120 and to CD4, which is known to mediate HIV-1 viral entry into cells.¹ Ophiobolin C is also reported to be cytotoxic to chronic lymphocytic leukemia cells ($\text{LC}_{50} = 8 \text{ nM}$).²

References

1. Jayasurla, H., Herath, K. B., Ondeyka, J. G., *et al.* Isolation and structure of antagonists of chemokine receptor (CCR5). *J. Nat. Prod.* **67**(6), 1036-1038 (2004).
2. Bladt, T. T., Dürr, C., Knudsen, P. B., *et al.* Bio-activity and dereplication-based discovery of ophiobolins and other fungal secondary metabolites targeting leukemia cells. *Molecules* **18**(12), 14629-14650 (2013).

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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