

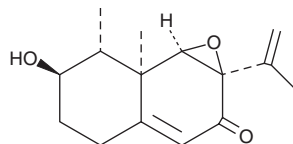
PRODUCT INFORMATION



Sporogen-AO 1

Item No. 29576

CAS Registry No.: 88418-12-6
Formal Name: (1aR,6R,7R,7aR,7bR)-4,5,6,7,7a,7b-hexahydro-6-hydroxy-7,7a-dimethyl-1a-(1-methylethenyl)-naphth[1,2-b]oxiren-2(1aH)-one
Synonym: (+)-Sporogen-AO 1
MF: C₁₅H₂₀O₃
FW: 248.3
Purity: ≥70%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Penicillium* sp.



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

Laboratory Procedures

Sporogen-AO 1 is supplied as a solid. A stock solution may be made by dissolving the sporogen-AO 1 in the solvent of choice, which should be purged with an inert gas. Sporogen-AO 1 is soluble in organic solvents such as ethanol, methanol, dichloromethane, and DMSO.

Description

Sporogen-AO 1 is a fungal metabolite originally isolated from *A. oryzae* that has diverse biological activities.¹⁻⁵ It inhibits HIV-1 Tat transactivation in a cell-based assay with an IC₅₀ value of 15.8 μM.⁴ Sporogen-AO 1 is cytotoxic to HeLa, KB, and NCI H187 cancer cells (IC₅₀s = 8.3, 9, and 5.1 μM, respectively).^{2,5} It is active against *C. albicans* (MIC = 4 mM).³

References

1. Tanaka, S., Wada, K., Marumo, S., *et al.* Structure of sporogen-ao 1, a sporogenic substance of *Aspergillus oryzae*. *Tetrahedron Lett.* **25(51)**, 5907-5910 (1984).
2. Motohashi, K., Hashimoto, J., Inaba, S., *et al.* New sesquiterpenes, JBIR-27 and -28, isolated from a tunicate-derived fungus, *Penicillium* sp. SS080624SCf1. *J. Antibiot. (Tokyo)* **62(5)**, 247-250 (2009).
3. Yurchenko, A., Smetanina, O.F., Kalinovskiy, A., *et al.* Biologically active metabolites of the facultative marine fungus *Penicillium citrinum*. *Chem. Nat. Compd.* **48(6)**, 996-998 (2013).
4. Jayasuriya, H., Zink, D.L., Polishook, J.D., *et al.* Identification of diverse microbial metabolites as potent inhibitors of HIV-1 Tat transactivation. *Chem. Biodivers.* **2(1)**, 112-122 (2005).
5. Tansakul, C., Rukachaisirikul, V., Chalothorn, T., *et al.* Synthesis and cytotoxicity against KB and NCI-H187 cell lines of sporogen AO-1 analogues. *Phytochem. Lett.* **22**, 128-132 (2017).

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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