

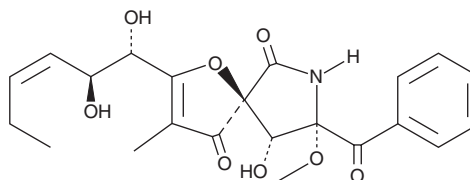
PRODUCT INFORMATION



Pseurotin A

Item No. 14441

CAS Registry No.: 58523-30-1
Formal Name: (5S)-8S-benzoyl-2-[1S,2S-dihydroxy-3Z-hexen-1-yl]-9R-hydroxy-8-methoxy-3-methyl-1-oxa-7-azaspiro[4.4]non-2-ene-4,6-dione
Synonym: NSC 348694
MF: C₂₂H₂₅NO₈
FW: 431.4
Purity: ≥98%
Supplied as: A powder
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Aspergillus fumigatus*



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

Laboratory Procedures

Pseurotin A is supplied as a powder. A stock solution may be made by dissolving the pseurotin A in the solvent of choice, which should be purged with an inert gas. Pseurotin A is soluble in the organic solvent methanol.

Description

Pseurotin A is a secondary metabolite produced by *Aspergillus* and other fungi.¹ Its expression is induced in response to hypoxia.² Pseurotin A has been shown to inhibit IgE production by mouse B cells in culture (IC₅₀ = 3.6 μM) and dose-dependently (0.4-25 μg/ml) stimulate neuritogenic activity in rat pheochromocytoma PC12 cells.^{3,4} It also demonstrates nematicidal activity at 300 μg/ml.⁵

References

1. Maiya, S., Grundmann, A., Li, X., *et al.* Identification of a hybrid PKS/NRPS required for pseurotin A biosynthesis in the human pathogen *Aspergillus fumigatus*. *Chembiochem* **8(14)**, 1736-1743 (2007).
2. Vödisch, M., Scherlach, K., Winkler, R., *et al.* Analysis of the *Aspergillus fumigatus* proteome reveals metabolic changes and the activation of the pseurotin A biosynthesis gene cluster in response to hypoxia. *J. Proteome Res.* **10(5)**, 2508-2524 (2011).
3. Ishikawa, M., Ninomiya, T., Akabane, H., *et al.* Pseurotin A and its analogues as inhibitors of immunoglobulin E production. *Bioorg. Med. Chem. Lett.* **19(5)**, 1457-1460 (2009).
4. Komagata, D., Fujita, S., Yamashita, N., *et al.* Novel neuritogenic activities of pseurotin A and penicillic acid. *J. Antibiot. (Tokyo)* **49(9)**, 958-959 (1996).
5. Hayashi, A., Fujioka, S., Nukina, M., *et al.* Fumiquinones A and B, nematicidal quinones produced by *Aspergillus fumigatus*. *Biosci. Biotechnol. Biochem.* **71(7)**, 1697-1702 (2007).

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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