

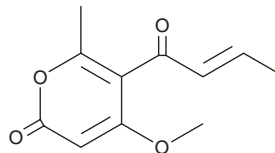
PRODUCT INFORMATION



Pyrenocine A

Item No. 29622

CAS Registry No.: 76868-97-8
Formal Name: 4-methoxy-6-methyl-5-[(2E)-1-oxo-2-buten-1-yl]-2H-pyran-2-one
MF: C₁₁H₁₂O₄
FW: 208.2
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

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

Description

Pyrenocine A is a fungal metabolite that has been found in *P. terrestris* and has diverse biological activities.¹ It inhibits the asexual spore germination of the plant pathogenic fungi *F. oxysporum*, *F. solani*, *M. hiemalis*, and *R. stolonifer* (EC₅₀s = 14, 20, 20, and 25 µg/ml, respectively). Pyrenocine A is active against *B. subtilis*, *S. aureus*, and *E. coli* (IC₅₀s = 30, 45, and 200 µg/ml, respectively). It inhibits onion seedling elongation (EC₅₀ = 4 µg/ml). Pyrenocine A is also a phytotoxin that inhibits lettuce seed germination and rice seedling elongation.^{2,3}

References

1. Sparace, S.A., Reeleder, R.D., and Khanizadeh, S. Antibiotic activity of the pyrenocines. *Can. J. Microbiol.* **33(4)**, 327-330 (1987).
2. Sato, H., Konoma, K., and Sakamura, S. Phytotoxins produced by onion pink root fungus, *Pyrenochaeta terrestris*. *Agric. Biol. Chem.* **43(11)**, 2409-2411 (1979).
3. Sato, H., Konoma, K., Sakamura, S., et al. X-Ray crystal structure of pyrenocine A, a phytotoxin from *Pyrenochaeta terrestris*. *Agric. Biol. Chem.* **45(3)**, 795-797 (1981).

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