

Product Data Sheet

Product Name: Pyrenocine A

Cat. No.: GC48014

Chemical Properties

Cas. No. 76868-97-8

SMILES O=C1OC(C)=C(C(/C=C/C)=O)C(OC)=C1

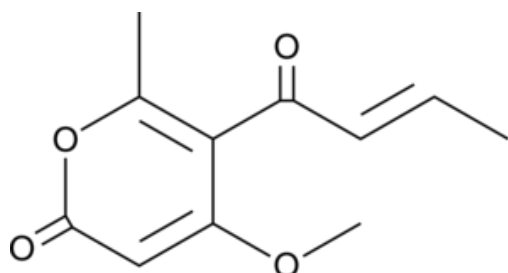
Formula C₁₁H₁₂O₄ M.Wt 208.2

Solubility Dichloromethane: soluble, DMSO: soluble, Ethanol: soluble, Methanol: soluble
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

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}

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

Caution: Product has not been fully validated for medical applications. For research use only.

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onion pink root fungus, Pyrenochaeta terrestris Agric. Biol. Chem. 43(11)2409-2411 (1979) 3. Sato, H., Konomi, 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)

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