

PRODUCT INFORMATION



Cochlioquinone B

Item No. 25121

CAS Registry No.: 32450-26-3
Formal Name: (3R,4aR,6aR,12aR,12bR)-9-[(1S,3S)-1,3-dimethyl-2-oxopentyl]-1,2,3,4a,5,6,6a,12,12a,12b-decahydro-3-(1-hydroxy-1-methylethyl)-6a,12b-dimethyl-pyrano[3,2-a]xanthene-8,11-dione

MF: C₂₈H₄₀O₆

FW: 472.6

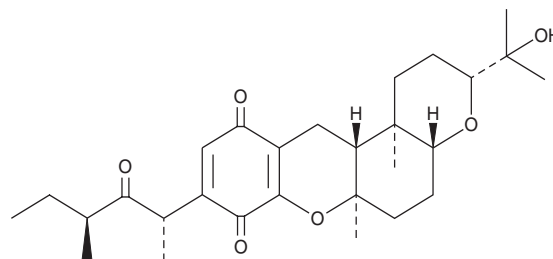
Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Fungus/*Bipolaris leersia*



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

Laboratory Procedures

Cochlioquinone B is supplied as a solid. A stock solution may be made by dissolving the cochlioquinone B in the solvent of choice, which should be purged with an inert gas. Cochlioquinone B is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Cochlioquinone is a sesquiterpene metabolite originally isolated from *C. miyabeanus*.¹ It is a phytotoxin that inhibits root growth of finger millet (*E. coracana*) and rice plants (*O. sativa*) by 59.9 and 51.7%, respectively, when used at a concentration of 100 ppm.² Cochlioquinone B inhibits NADH oxidase and NADH-2,3-dimethoxy-5-pentyl-1,4-benzoquinone reductase from bovine heart mitochondria.³

References

1. Carruthers, J.R., Cerrini, S., Fedeli, W., *et al.* Structures of cochlioquinones A and B, new metabolites of *Cochliobolus miyabeanus*: Chemical and X-ray crystallographic determination. *J. Chem. Soc. D.* **3**, 164-166 (1971).
2. Miyagawa, H., Nagai, S., Tsurushima, T., *et al.* Phytotoxins produced by the plant pathogenic fungus *Bipolaris bicolor* El-1. *Biosci. Biotech. Biochem.* **58(6)**, 1143-1145 (1994).
3. Lim, C.-H., Ueno, H., Miyoshi, H., *et al.* Phytotoxic compounds cochlioquinones are inhibitors of mitochondrial NADH-ubiquinone reductase. *J. Pest. Sci.* **21(2)**, 213-215 (1996).

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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