

PRODUCT INFORMATION



Roquefortine C

Item No. 15376

CAS Registry No.: 58735-64-1
Formal Name: (3E,5aS,10bR)-10b-(1,1-dimethyl-2-propen-1-yl)-6,10b,11,11aS-tetrahydro-3-(1H-imidazol-5-ylmethylene)-2H-pyrazino[1',2':1,5]pyrrolo[2,3-b]indole-1,4(3H,5aH)-dione

Synonym: NSC 292134

MF: C₂₂H₂₃N₅O₂

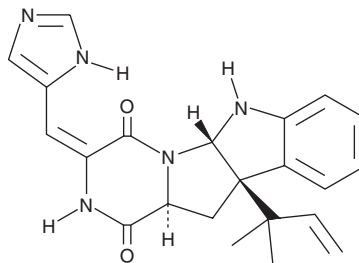
FW: 389.5

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

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

Description

Roquefortine C is a mycotoxin that was first isolated from a strain of *P. roqueforti*, a species of *Penicillium* commercially used to ripen blue-veined cheeses.¹ It has also been isolated from other members of the *Penicillium* genus found in contaminated food products where it displays neurotoxic properties.² It has been shown to both activate a P-glycoprotein transport system involved in the efflux of xenobiotics and to inhibit cytochrome P450 3A detoxification enzymes.³ It has also been used as a biomarker for penitrem A (Item No. 11347) intoxication.⁴

References

1. Garc a-Rico, R.O., Ch vez, R., Fierro, F., *et al.* Effect of a heterotrimeric G protein alpha subunit on conidia germination, stress response, and roquefortine C production in *Penicillium roqueforti*. *Int. Microbiol.* **12**(2), 123-129 (2009).
2. Richard, D.J., Schiavi, B., and Joulli , M.M. Synthetic studies of roquefortine C: Synthesis of isoroquefortine C and a heterocycle. *Proc. Natl. Acad. Sci. USA* **101**(33), 11971-11976 (2004).
3. Aninat, C., Andr , F., and Delaforge, M. Oxidative metabolism by P450 and function coupling to efflux systems: Modulation of mycotoxin toxicity. *Food. Addit. Contam.* **22**(4), 361-368 (2005).
4. Tiwary, A.K., Puschner, B., and Poppenga, R.H. Using roquefortine C as a biomarker for penitrem A intoxication. *J. Vet. Diagn. Invest.* **21**(2), 237-239 (2009).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/09/2022

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