

PRODUCT INFORMATION



Meleagrín

Item No. 17850

CAS Registry No.: 71751-77-4
Formal Name: (3E,7aR,12aS)-7a-(1,1-dimethyl-2-propen-1-yl)-7a,12-dihydro-6-hydroxy-3-(1H-imidazol-5-ylmethylene)-12-methoxy-1H,5H-imidazo[1',2':1,2]pyrido[2,3-b]indole-2,5(3H)-dione

Synonym: 6-O-Methyloxaline

MF: C₂₃H₂₃N₅O₄

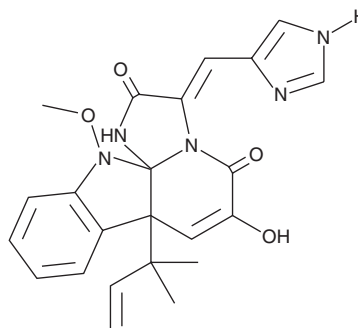
FW: 433.5

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

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

Description

Meleagrín is an antibiotic derived from a deep ocean, penicillin-producing *P. chrysogenum*.¹ It is produced as an end product in the roquefortine branched biosynthetic pathway.^{2,3} Meleagrín has been identified as an inhibitor of the bacterial enoyl-acyl carrier protein reductase (FabI) with IC₅₀ values of 40.1 and 33.2 μM for *S. aureus* and *E. coli* FabI, respectively.¹ It inhibits the growth of *S. aureus*, *E. coli*, and *S. pneumoniae* with MICs ranging from 32-64 μg/ml.¹

References

1. Zheng, C.J., Sohn, M.J., Lee, S., *et al.* Meleagrín, a new FabI inhibitor from *Penicillium chrysogenum* with at least one additional mode of action. *PLoS One* **8(11)**, (2013).
2. Ali, H., Ries, M.I., Nijland, J.G., *et al.* A branched biosynthetic pathway is involved in production of roquefortine and related compounds in *Penicillium chrysogenum*. *PLoS One* **8(6)**, (2013).
3. Ries, M.I., Ali, H., Lankhorst, P.P., *et al.* Novel key metabolites reveal further branching of the roquefortine/meleagrín biosynthetic pathway. *J. Biol. Chem.* **288(52)**, 37289-37295 (2013).

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, 11/21/2022

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