

# PRODUCT INFORMATION



## Actinopyrone A

Item No. 23140

**CAS Registry No.:** 88378-59-0  
**Formal Name:** 2-[(2E,5E,7E,9R,10R,11E)-10-hydroxy-3,7,9,11-tetramethyl-2,5,7,11-tridecatetraen-1-yl]-6-methoxy-3,5-dimethyl-4H-pyran-4-one

**Synonyms:** (+)-Actinopyrone A, SS 1538A

**MF:** C<sub>25</sub>H<sub>36</sub>O<sub>4</sub>

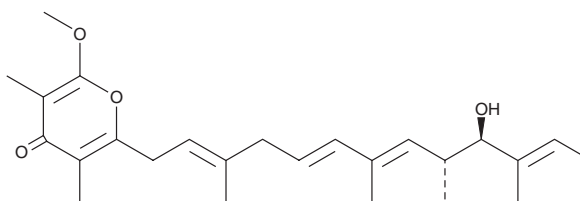
**FW:** 400.6

**Purity:** ≥95%

**Supplied as:** An oil

**Storage:** -20°C

**Stability:** ≥4 years



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

### Laboratory Procedures

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

### Description

Actinopyrone A is a pyrone isolated from *S. pactum* with diverse biological activities.<sup>1</sup> It has selective and potent antimicrobial activity against *H. pylori* (MIC = 0.1 ng/ml) with no activity against other Gram-negative bacteria including *E. coli*, *K. pneumoniae*, *P. aeruginosa*, and *B. fragilis*.<sup>1,2</sup> Actinopyrone A also mildly inhibits growth of Gram-positive bacteria and dermatophytes with MIC values ranging from <6.25 to 25 µg/ml.<sup>1</sup> Intravenous administration of actinopyrone A (30 µg/kg) increases coronary blood flow in dogs by 196.2%.

### References

1. Yano, K., Yokoi, K., Sato, J., *et al.* Actinopyrones A, B and C, new physiologically active substances. I. Producing organism, fermentation, isolation and biological properties. *J. Antibiot. (Tokyo)* **39(1)**, 32-37 (1986).
2. Taniguchi, M., Watanabe, M., Nagai, K., *et al.* γ-pyrone compounds with selective and potent anti-*Helicobacter pylori* activity. *J. Antibiot. (Tokyo)* **53(8)**, 844-847 (2000).

#### 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, 12/16/2022

#### 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