

# PRODUCT INFORMATION



## Rugulotrosin A

Item No. 28157

**CAS Registry No.:** 685135-81-3  
**Formal Name:** (4R,4'R,4aR,4'aR,7R)-rel-2,2',3,3',4,4',9,9'-octahydro-1,1',4,4',8,8'-hexahydroxy-6,6'-dimethyl-9,9'-dioxo-[7,7'-bi-4aH-xanthene]-4a,4'a-dicarboxylic acid dimethyl ester

**MF:** C<sub>32</sub>H<sub>30</sub>O<sub>14</sub>

**FW:** 638.6

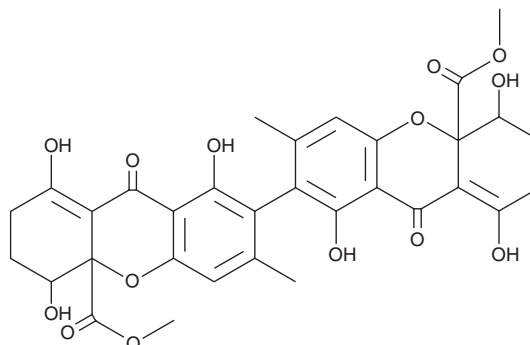
**Purity:** ≥98%

**Supplied as:** A solid

**Storage:** -20°C

**Stability:** ≥4 years

**Item Origin:** Fungus/*Penicillium* sp.



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

### Laboratory Procedures

Rugulotrosin A is supplied as a solid. A stock solution may be made by dissolving the rugulotrosin A in the solvent of choice. Rugulotrosin A is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Rugulotrosin A is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Rugulotrosin A is an antibiotic originally isolated from *Penicillium*.<sup>1,2</sup> It is active against the Gram-positive bacteria *E. faecalis*, *B. cereus*, *B. subtilis*, and *S. aureus* with 99% lethal dose (LD<sub>99</sub>) values of 1.6, 3.1, 5.5, and 200 µg/ml, respectively.<sup>1</sup> Rugulotrosin A is inactive against Gram-negative bacteria.<sup>1,2</sup>

### References

1. Stewart, M., Capon, R.J., White, J.M., *et al.* Rugulotrosins A and B: Two new antibacterial metabolites from an Australian isolate of a *Penicillium* sp. *J. Nat. Prod.* **67**(4), 728-730 (2004).
2. Qin, T., Skraba-Joiner, S.L., Khalil, Z.G., *et al.* Atropselective syntheses of (-) and (+) rugulotrosin A utilizing point-to-axial chirality transfer. *Nat. Chem.* **7**(3), 234-240 (2015).

#### 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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