

# PRODUCT INFORMATION



## Enramycin B

Item No. 40848

CAS Registry No.: 34304-21-7

Formal Name: (2S)-N-[(2Z,4E)-10-methyl-1-oxo-2,4-dodecadien-1-yl]-L- $\alpha$ -aspartyl-L-threonyl-(2R)-2-(4-hydroxyphenyl)glycyl-D-ornithyl-D-allothreonyl-(2S)-2-(4-hydroxyphenyl)glycyl-(2R)-2-(4-hydroxyphenyl)glycyl-L-allothreonyl-N<sup>5</sup>-(aminocarbonyl)-L-ornithyl-3-[(5R)-2-amino-4,5-dihydro-1H-imidazol-5-yl]-D-alanyl-(2S)-2-(4-hydroxyphenyl)glycyl-D-seryl-(2S)-2-(3,5-dichloro-4-hydroxyphenyl)glycylglycyl-3-[(5R)-2-amino-4,5-dihydro-1H-imidazol-5-yl]-L-alanyl-D-alanyl-2-(4-hydroxyphenyl)-glycine, (17→2)-lactone

Synonym: Enduracidin B

MF: C<sub>108</sub>H<sub>140</sub>Cl<sub>2</sub>N<sub>26</sub>O<sub>31</sub>

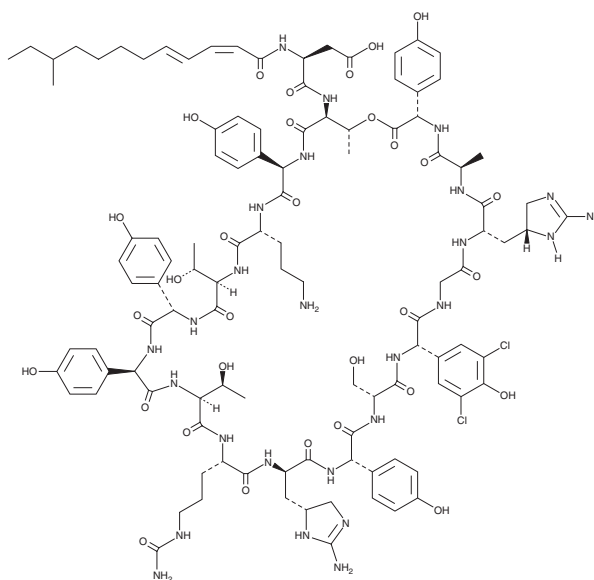
FW: 2,369.4

Purity: ≥80%

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

Enramycin B is supplied as a solid. A stock solution may be made by dissolving the enramycin B in the solvent of choice, which should be purged with an inert gas. Enramycin B is slightly soluble (0.1-1 mg/ml) in methanol.

Enramycin B is slightly soluble (0.1-1 mg/ml) 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

Enramycin B is a lipopeptide antibiotic that has been found in *S. fungicidicus*.<sup>1,2</sup> It also inhibits avian myeloblastosis virus reverse transcriptase by 70% when used at a concentration of 40  $\mu$ g/ml in a cell-free assay.<sup>2</sup> Formulations containing enramycin B have been used as feed additives to prevent bacterial necrotic enteritis in livestock.

## References

1. Iwasaki, H., Horii, S., Asai, M., *et al.* Enduracidin, a new antibiotic. VIII. Structures of enduracidins A and B. *Chem. Pharm. Bull.* **21(6)**, 1184-1191 (1973).
2. Inouye, Y., Take, Y., Nakamura, S., *et al.* Screening for inhibitors of avian myeloblastosis virus reverse transcriptase and effect on the replication of AIDS-virus. *J. Antibiot. (Tokyo)* **40(1)**, 100-104 (1987).

### 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.

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