# **PRODUCT** INFORMATION



## Bottromycin A<sub>2</sub>

Item No 32921

nem no. 5272	1	
CAS Registry No.: Formal Name:	15005-62-6 (3R)-N-[(2S)-2-[[glycyl-(3R)-3-methyl- L-prolyl-L-valyl]amino]-1-imino-3,3- dimethylbutyl]-3-methyl-L-valyl-( $\beta$ S)-β- methyl-L-phenylalanyl-3-(2-thiazolyl)-β- alanine, cyclic (1 $\rightarrow$ 1')-imine, methyl ester	
MF:	C <sub>42</sub> H <sub>62</sub> N <sub>8</sub> O <sub>7</sub> S	́мн Н
FW:	823.1	
Purity:	≥80%	( ``o /N
Supplied as:	A solid	S
Storage:	-20°C	
Stability:	≥4 years	
Item Origin:	Bacterium/Streptomyces No. 3668-L2	

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

#### Laboratory Procedures

Bottromycin  $A_2$  is supplied as a solid. A stock solution may be made by dissolving the bottromycin  $A_2$  in the solvent of choice. Bottromycin A2 is soluble in organic solvents such as methanol and ether, which should be purged with an inert gas. Bottromycin  $A_2$  is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

#### Description

Bottromycin A2 is an antibiotic originally isolated from Streptomyces.<sup>1</sup> It blocks the binding of aminoacyl-tRNA to the A site of the 50S ribosome, inhibiting protein synthesis.<sup>2</sup> Bottromycin A<sub>2</sub> is active against clinical isolates of methicillin-resistant Staphylococcus aureus (MRSA) and vancomycin-resistant Enterococci with MIC values of 1 and 0.5 µg/ml, respectively.

#### References

- 1. Nakamura, S., Yajima, T., Lin, Y., et al. Isolation and characterization of bottromycins A2, B2, C2. J. Antibiot. (Tokyo) 20(1), 1-5 (1967).
- 2. Gouda, H., Kobayashi, Y., Yamada, T., et al. Three-dimensional solution structure of bottromycin A<sub>2</sub>: A potent antibiotic active against methicillin-resistant Staphylococcus aureus and vancomycin-resistant Enterococci. Chem. Pharm. Bull. (Tokyo) 60(2), 169-171 (2012).

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, 12/02/2022

### 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