

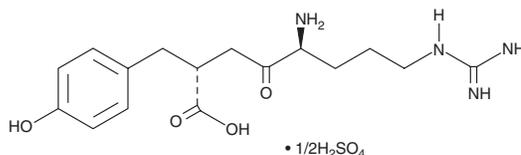
# PRODUCT INFORMATION



## Arphamenine B (hemisulfate)

Item No. 18506

**CAS Registry No.:** 144110-38-3  
**Formal Name:** αR-[(3S)-3-amino-6-[(aminoiminomethyl)amino]-2-oxohexyl]-4-hydroxybenzenepropanoic acid, hemisulfate  
**MF:** C<sub>16</sub>H<sub>24</sub>N<sub>4</sub>O<sub>4</sub> • 1/2H<sub>2</sub>SO<sub>4</sub>  
**FW:** 385.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 225, 278 nm  
**Supplied as:** A crystalline 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

Arphamenine B (hemisulfate) is supplied as a crystalline solid. A stock solution may be made by dissolving the arphamenine B (hemisulfate) in the solvent of choice, which should be purged with an inert gas. Arphamenine B (hemisulfate) is soluble in the organic solvent DMSO at a concentration of approximately 0.2 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of arphamenine B (hemisulfate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of arphamenine B (hemisulfate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Aminopeptidase B is a Zn<sup>2+</sup>-dependent exopeptidase that selectively removes arginine and/or lysine from the amino terminus of peptide substrates.<sup>1</sup> This enzyme is a metalloprotease commonly found on the surface of mammalian cells, including macrophages and lymphocytes. Arphamenine B is an aminopeptidase B inhibitor first isolated from bacteria.<sup>2,3</sup> Like the aminopeptidase inhibitors bestatin (Item No. 70520) and amastatin (Item No. 16719), arphamenine B enhances immune responses.<sup>2</sup> Arphamenine B is commonly used to characterize novel proteases.<sup>4,5</sup>

### References

1. Foulon, T., Cadel, S., and Cohen, P. *Int. J. Biochem. Cell Biol.* **31(7)**, 747-750 (1999).
2. Umezawa, H., Aoyagi, T., Ohuchi, S., et al. *J. Antibiot. (Tokyo)* **36(11)**, 1572-1575 (1983).
3. Ohuchi, S., Suda, H., Naganawa, H., et al. *J. Antibiot. (Tokyo)* **36(11)**, 1576-1580 (1983).
4. Keane, F. and O'Cuinn, G. *Neurosci. Res.* **44(1)**, 111-120 (2002).
5. Kubo, H., Kotani, M., Yamamoto, Y., et al. *Zoolog. Sci.* **25(1)**, 80-87 (2008).

#### 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, 10/17/2022

#### 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