

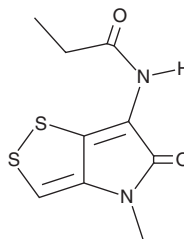
# PRODUCT INFORMATION



## Aureothricin

Item No. 19942

**CAS Registry No.:** 574-95-8  
**Formal Name:** N-(4,5-dihydro-4-methyl-5-oxo-1,2-dithiolo[4,3-b]pyrrol-6-yl)-propanamide  
**Synonyms:** Farcinicin, Propionylpyrrothione  
**MF:** C<sub>9</sub>H<sub>10</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub>  
**FW:** 242.3  
**Purity:** ≥98%  
**Supplied as:** A powder  
**Storage:** -20°C  
**Stability:** ≥4 years



**Special Conditions:** After reconstitution protect from light at -20°C.

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

### Laboratory Procedures

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

### Description

Aureothricin is a dithiopyrrolone antibiotic first isolated from *Streptomyces* sp. that exhibits broad-spectrum antimicrobial activity against many Gram-positive and Gram-negative bacteria, as well as strains of *M. tuberculosis*.<sup>1</sup> It is also reported to inhibit tumor angiogenesis, blocking activity of the vitronectin receptor integrin  $\alpha\beta 3$  with an IC<sub>50</sub> value of 1.1  $\mu\text{M}$ .<sup>2</sup>

### References

1. Li, B., Wever, W.J., Walsh, C.T., *et al.* Dithiopyrrolones: Biosynthesis, synthesis, and activity of a unique class of disulfide-containing antibiotics. *Nat. Prod. Rep.* **31(7)**, 905-923 (2014).
2. Minamiguchi, K., Kumagai, H., Masuda, T., *et al.* Thiolutin, an inhibitor of HUVEC adhesion to vitronectin, reduces paxillin in HUVECs and suppresses tumor cell-induced angiogenesis. *Int. J. Cancer* **93(3)**, 307-316 (2001).

#### 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, 11/11/2022

#### 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