

# PRODUCT INFORMATION



## Ansatrienin A

Item No. 21995

CAS Registry No.: 82189-03-5

Formal Name: N-(cyclohexylcarbonyl)-D-alanine  
(5R,6E,8E,10E,13S,14R,15R,16Z)-  
15-hydroxy-5-methoxy-14,16-  
dimethyl-3,22,24-trioxo-2-  
azabicyclo[18.3.1]tetracos-  
6,8,10,16,20,23-hexaen-13-yl ester

Synonym: Mycotrienin I

MF: C<sub>36</sub>H<sub>48</sub>N<sub>2</sub>O<sub>8</sub>

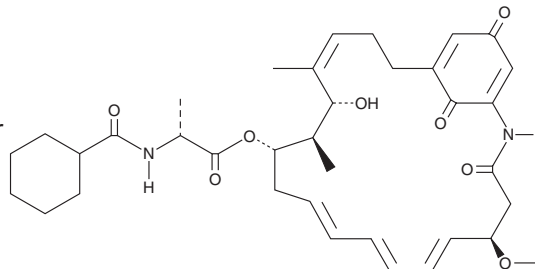
FW: 636.8

Purity: ≥98%

Supplied as: A powder

Storage: -20°C

Stability: ≥4 years



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

### Laboratory Procedures

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

### Description

Ansatrienin A is an ansamycin antibiotic and antifungal agent first isolated from *S. collinus* and *S. rishiriensis*.<sup>1,2</sup> In fetal rat long bones, it is an inhibitor of parathyroid hormone-induced calcium release (IC<sub>50</sub> = 64 nM), which is a measure of bone resorption, and pp60<sup>c-src</sup> kinase (IC<sub>50</sub> = 100 nM).<sup>3</sup> It also inhibits TNF-α-induced expression of intercellular adhesion molecule-1 (ICAM-1; IC<sub>50</sub> = 570 nM).<sup>4</sup> Early *in vitro* studies showed that ansatrienin A potentiates the chemotherapeutic action of 5-fluorouracil (Item No. 14416), cisplatin (Item No. 13119), bleomycin (Item No. 13877), mitomycin C (Item No. 11435), and 6-mercaptopurine.<sup>5</sup> It is an oxidized form of ansatrienin B (Item No. 21996).<sup>2</sup>

### References

1. Damberg, M., Russ, P., and Zeeck, A. *Tetrahedron Lett.* **23**(1), 59-62 (1982).
2. Sugita, M., Natori, Y., Sasaki, T., et al. *J. Antibiot. (Tokyo)* **35**(11), 1460-1466 (1982).
3. Feuerbach, D., Waelchli, R., Fehr, T., et al. *J. Biol. Chem.* **270**(43), 25949-25955 (1995).
4. Yamada, Y., Tashiro, E., Taketani, S., et al. *J. Antibiot. (Tokyo)* **64**(5), 361-366 (2011).
5. Kuwano, M., Ikezaki, K., Mamizuka, K., et al. *Gan.* **74**(5), 759-766 (1983).

#### 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, 11/02/2022

#### 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