

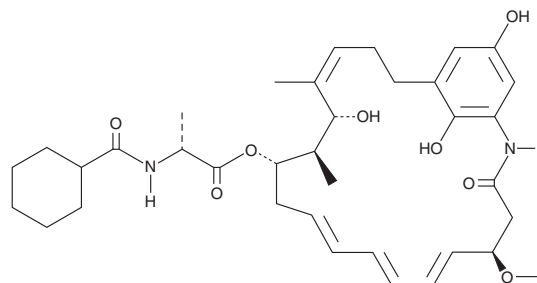
PRODUCT INFORMATION



Ansatrienin B

Item No. 21996

CAS Registry No.: 82189-04-6
Formal Name: N-(cyclohexylcarbonyl)-D-alanine, (5R,6E,8E,10E,13S,14R,15R,16Z)-15,22,24-trihydroxy-5-methoxy-14,16-dimethyl-3-oxo-2-azabicyclo[18.3.1]tetracos-1(24),6,8,10,16,20,22-heptaen-13-yl ester
Synonyms: Mycotrienin II, SDZ-115 962
MF: C₃₆H₅₀N₂O₈
FW: 638.8
Purity: ≥95%
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 B is supplied as a powder. A stock solution may be made by dissolving the ansatrienin B in the solvent of choice, which should be purged with an inert gas. Ansatrienin B is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Ansatrienin B is an ansamycin antibiotic and antifungal agent first isolated from *S. collinus* and *S. rishiriensis*.^{1,2} In fetal rat long bones, it is an inhibitor of parathyroid hormone-induced calcium release (IC₅₀ = 21 nM), which is a measure of bone resorption, and pp60^{C-Src} kinase (IC₅₀ = 50 nM).³ It is an inhibitor of translation at the protein synthesis stage by specific inhibition of L-leucine incorporation (IC₅₀ = 58 nM in A549 cells).⁴ It also inhibits TNF- α -induced expression of intercellular adhesion molecule-1 (ICAM-1; IC₅₀ = 300 nM). Early *in vitro* studies showed that ansatrienin B 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.⁵ Ansatrienin B is a hydroquinone form of ansatrienin A (Item No. 21995).²

References

1. Damberg, M., Russ, P., and Zeeck, A. Die konstitution der fungistatischen ansamycin-antibiotica ansatrienin A und B. *Tetrahedron Lett.* **23(1)**, 59-62 (1982).
2. Sugita, M., Natori, Y., Sasaki, T., et al. Studies on mycotrienin antibiotics, a novel class of ansamycins. I. Taxonomy, fermentation, isolation and properties of mycotrienins I and II. *J. Antibiot. (Tokyo)* **35(11)**, 1460-1466 (1982).
3. Feuerbach, D., Waelchli, R., Fehr, T., et al. Mycotrienins. A new class of potent inhibitors of osteoclastic bone resorption. *J. Biol. Chem.* **270(43)**, 25949-25955 (1995).
4. Yamada, Y., Tashiro, E., Taketani, S., et al. Mycotrienin II, a translation inhibitor that prevents ICAM-1 expression induced by pro-inflammatory cytokines. *J. Antibiot. (Tokyo)* **64(5)**, 361-366 (2011).
5. Kuwano, M., Ikezaki, K., Mamizuka, K., et al. Potentiation of mitomycin C, 6-mercaptopurine, bleomycin, cis-diamminedichloroplatinum and 5-fluorouracil by mycotrienins and mycotrienols. *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.

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