



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)



PRODUCT INFORMATION



Fusidic Acid-d₆ Item No. 29994

Formal Name: (Z)-2-((3R,4S,5S,8S,9S,10S,11R,13R,14S,16S)-16-acetoxy-3,11-dihydroxy-4,8,10,14-tetramethylhexadecahydro-17H-cyclopenta[a]phenanthren-17-ylidene)-6-(methyl-d₃)hept-5-enoic-7,7,7-d₃ acid

MF: C₃₁H₄₂D₆O₆

FW: 522.8

Chemical Purity: ≥98% (Fusidic Acid)

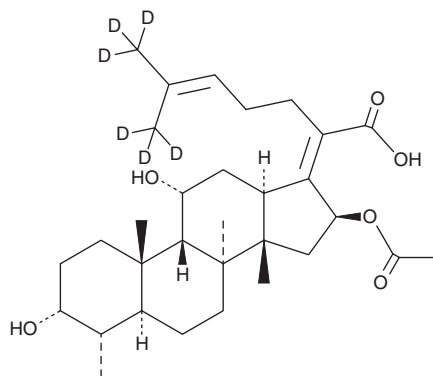
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years

Item Origin: Synthetic



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

Laboratory Procedures

Fusidic acid-d₆ is intended for use as an internal standard for the quantification of fusidic acid (Item No. 14825) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Fusidic acid-d₆ is supplied as a solid. A stock solution may be made by dissolving the fusidic acid-d₆ in the solvent of choice, which should be purged with an inert gas. Fusidic acid-d₆ is soluble in methanol and slightly soluble in chloroform.

Description

Fusidic acid is a fusidane antibiotic originally isolated from *F. coccineum*.¹ It is active against the Gram-positive bacteria *S. aureus*, *S. pyogenes*, *C. diphtheriae*, *B. subtilis*, and *C. tetani* (MIC₅₀s = 0.01-20 µg/ml) but not the Gram-negative bacteria *E. coli*, *S. typhimurium*, and *P. vulgaris* or the fungi *C. albicans* and *A. fumigatus* (MIC₅₀s = >100 µg/ml for all).² Fusidic acid inhibits ribosomal recycling and protein translocation, processes mediated by elongation factor G (EF-G), in isolated *E. coli* ribosomes (IC₅₀s = ~0.1 and ~200 µM, respectively).³ Topical administration of fusidic acid (2%) reduces the number of skin colony forming units (CFUs) and levels of TNF-α and IL-6 in a mouse model of methicillin-resistant *S. aureus* (MRSA) skin wound infection.⁴

References

1. Verbist, L. The antimicrobial activity of fusidic acid. *J. Antimicrob. Chemother.* **25(Suppl. B)**, 1-5 (1990).
2. Godtfredsen, W.O., Jahnsen, S., Lorck, H., et al. Fusidic acid: A new antibiotic. *Nature* **193**, 987 (1962).
3. Savelsbergh, A., Rodnina, M.V., and Wintermeyer, W. Distinct functions of elongation factor G in ribosome recycling and translocation. *RNA* **15(5)**, 772-780 (2009).
4. Mohamed, M.F. and Seleem, M.N. Efficacy of short novel antimicrobial and anti-inflammatory peptides in a mouse model of methicillin-resistant *Staphylococcus aureus* (MRSA) skin infection. *Drug Des. Devel. Ther.* **8**, 1979-1983 (2014).

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, 04/03/2020

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