



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 HandelsgmbH

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) 

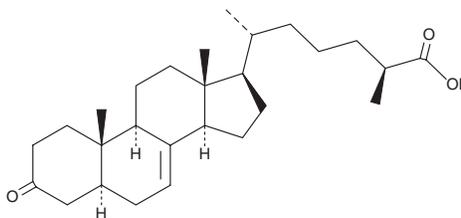
PRODUCT INFORMATION



(25S)- Δ^7 -Dafachronic Acid

Item No. 14101

CAS Registry No.: 949004-12-0
Formal Name: (5 α ,25S)-3-oxo-cholest-7-en-26-oic acid
Synonym: UPF-1404
MF: C₂₇H₄₂O₃
FW: 414.6
Purity: \geq 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

(25S)- Δ^7 -Dafachronic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the (25S)- Δ^7 -dafachronic acid in the solvent of choice. (25S)- Δ^7 -Dafachronic acid is soluble in organic solvents such as ethanol, DMSO, and methanol, which should be purged with an inert gas.

Description

During unfavorable environmental conditions, *C. elegans* larvae undergo arrest and form dauer larvae that can attach to other animals as a parasitic strategy for survival.^{1,2} DAF-12 is an orphan nuclear hormone receptor that regulates dauer larva diapause, reproductive development, fat metabolism, and life cycle/longevity in *C. elegans*.³⁻⁵ DAF-12 is required for entry into dauer when it is not bound to ligand by acting as a transcriptional repressor of target genes that favor reproductive development. (25S)- Δ^7 -Dafachronic acid is a sterol-derived hormone that acts as a ligand of DAF-12 with an EC₅₀ value of 23 nM.^{3,6-8} At 50 nM, (25S)- Δ^7 -Dafachronic acid inhibits the dauer-promoting activity of DAF-12, blocking the formation of infective larvae in several parasitic nematodes in favor of reproductive maturation to adults.^{1,9} Thus, selective ligand modulators of DAF-12 are a potential therapeutic approach to stop larvae progression during parasitic infection.²

References

1. Ogawa, A., Streit, A., Antebi, A., et al. *Curr. Biol.* **19**, 67-71 (2009).
2. Wang, Z., Zhou, X.E., Motola, D.L., et al. *Proc. Natl. Acad. Sci. USA* **106(23)**, 9138-9143 (2009).
3. Martin, R., Däbritz, F., Entchev, E.V., et al. *Org. Biomol. Chem.* **6**, 4293-4295 (2008).
4. Dumas, K.J., Guo, C., Wang, X., et al. *Dev. Biol.* **340(2)**, 605-612 (2010).
5. Cheong, M.C., Na, K., Kim, H., et al. *J. Biol. Chem.* **286(9)**, 7248-7256 (2011).
6. Motola, D.L., Cummins, C.L., Rottiers, V., et al. *Cell* **124**, 1209-1223 (2006).
7. Sharma, K.K., Wang, Z., Motola, D.L., et al. *Mol. Endocrinol.* **23(5)**, 640-648 (2009).
8. Beckstead, R.B. and Thummel, C.S. *Cell* **124**, 1137-1140 (2006).
9. Martin, R., Entchev, E.V., Kurzchalia, T.V., et al. *Org. Biomol. Chem.* **8**, 739-750 (2010).

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, 04/18/2017

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