



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) 

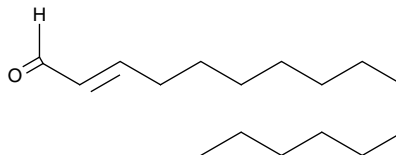
Product Information



(E)-2-Hexadecenal

Item No. 17566

CAS Registry No.: 22644-96-8
Formal Name: (2E)-2-hexadecenal
Synonym: *trans*-2-Hexadecenal
MF: C₁₆H₃₀O
FW: 238.4
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 218 nm



Laboratory Procedures

For long term storage, we suggest that (E)-2-hexadecenal be stored as supplied at -20°C. It should be stable for at least two years.

(E)-2-Hexadecenal is supplied as a crystalline solid. A stock solution may be made by dissolving the (E)-2-hexadecenal in the solvent of choice. (E)-2-Hexadecenal is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of (E)-2-hexadecenal in ethanol and DMF is approximately 30 mg/ml and approximately 10 mg/ml DMSO.

(E)-2-Hexadecenal is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (E)-2-hexadecenal should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. (E)-2-Hexadecenal has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Sphingosine-1-phosphate (S1P), a bioactive lipid involved in many signaling processes, is irreversibly degraded by the membrane-bound S1P lyase. (E)-2-Hexadecenal is a sphingolipid degradation product resulting from the action of S1P lyase. It can be further oxidized to (2E)-hexadecenoic acid by long-chain fatty aldehyde dehydrogenase prior to activation *via* coupling to coenzyme A. (E)-2-Hexadecenal has been shown to induce cytoskeletal reorganization that results in cell rounding, detachment, activation of downstream JNK targets, and eventual apoptosis in various cell types.¹ It reacts readily with deoxyguanosine and DNA to form aldehyde-derived DNA adducts.²

References

1. Kumar, A., Byun, H.-S., Bittman, R., *et al.* The sphingolipid degradation product *trans*-2-hexadecenal induces cytoskeletal reorganization and apoptosis in a JNK-dependent manner. *Cell. Signal.* **23**(7), 1144-1152 (2011).
2. Upadhyaya, P., Kumar, A., Byun, H.-S., *et al.* The sphingolipid degradation product *trans*-2-hexadecenal forms adducts with DNA. *Biochem. Biophys. Res. Commun.* **424**(1), 18-21 (2012).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/17566

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog**.

Copyright Cayman Chemical Company, 04/13/2015

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com