

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 in



Product Information



R-Palmitoyl-(1-methyl) Ethanolamide

Item No. 90353

CAS Registry No.: 142128-47-0

Formal Name: N-(2-hydroxy-1R-methylethyl)-

hexadecanamide

MF: $C_{19}H_{39}NO_2$ FW: 313.5 **Purity:** ≥98%

Stability: ≥2 years at -20°C Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that R-palmitoyl-(1-methyl) ethanolamide be stored as supplied at 4°C. It should be stable for at least two years.

R-palmitoyl-(1-methyl) ethanolamide is supplied as a crystalline solid. A stock solution may be made by dissolving the R-palmitoyl-(1-methyl) ethanolamide in an organic solvent purged with an inert gas. R-palmitoyl-(1-methyl) ethanolamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of R-palmitoyl-(1-methyl) ethanolamide in these solvents is at least 10, 25, and 3.3 mg/ml respectively.

R-palmitoyl-(1-methyl) ethanolamide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, R-palmitoyl-(1-methyl) ethanolamide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. R-palmitoyl-(1-methyl) ethanolamide has a solubility of 1 µg/ml in a 1:7 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Palmitoyl ethanolamide (PEA) is an endogenous cannabinoid found in brain, liver, and other mammalian tissues. 1 PEA has also been isolated from egg yolk and found to have anti-anaphylactic and anti-inflammatory activity in vitro.² R-palmitoyl-(1-methyl) ethanolamide is a synthetic analog of PEA which incorporates an (R)-methyl group vicinal to the alcohol on the ethanolamine moiety. The analogous modification to arachidonyl ethanolamide (AEA) protects the molecule from hydrolysis by fatty acid amide hydrolase (FAAH). This leads to prolonged duration of action and enhanced potency in vivo.³ R-palmitoyl-(1-methyl) ethanolamide would be expected to show enhancement of the inhibitory action of PEA on mast cells and other cells known to express the CB2 receptor. However, there are no published studies on the use of this compound to date.

References

- 1. Bachur, N.R., Masek, K., Melmon, K.L., et al. Fatty acid amides of ethanolamine in mammalian tissues. J. Biol. Chem. 240, 1019-1024 (1965).
- 2. Ganley, O.H., Graessle, O.E., Robinson, H.J., et al. Anti-inflammatory activity of compounds obtained from egg yolk, peanut oil, and soybean lecithin. *J. Lab. Clin. Med.* **51**, 709-714 (1958).
- Abadji, V., Lin, S., Taha, G., et al. (R)-Methanandamide: A chiral novel anandamide possessing higher potency and metabolic stability. J. Med. Chem. 37, 1889-1893 (1994).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/90353

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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 <u>meet our specifications</u>

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, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitity does not apply in the case of intentional acts or negligence of Cayman, is 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

Buyers exclusive remedy and Caymans sole hability increments man be immed to a teams of the purchase 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, 10/04/2013

Cayman Chemical

Mailing address

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

Phone

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

(734) 971-3640

custserv@caymanchem.com

www.caymanchem.com