

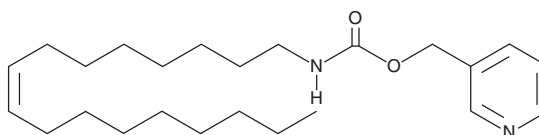
PRODUCT INFORMATION



N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate

Item No. 9002365

CAS Registry No.: 1450603-63-0
Formal Name: N-(8Z)-8-heptadecen-1-yl-carbamic acid, 3-pyridinylmethyl ester
MF: C₂₄H₄₀N₂O₂
FW: 388.6
Purity: ≥98%
UV/Vis.: λ_{max}: 260 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate is supplied as a crystalline solid. A stock solution may be made by dissolving the N-(8Z-heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate in the solvent of choice, which should be purged with an inert gas. N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-(8Z-heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate in ethanol and DMF is approximately 50 mg/ml and approximately 30 mg/ml in DMSO.

N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-(8Z-heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate 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.

Description

N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate is a synthetic analog of the long-chain fatty acid amides (macamides or macaenes) isolated from the maca (*L. meyenii*) plant, which are structurally related to cannabinoids.¹ Nineteen macamides have currently been identified and many are recognized as potent inhibitors of fatty acid amide hydrolase (FAAH) and demonstrate selective antiproliferative activity against diverse cancer cell lines.^{1,2} N-(8Z-Heptadecen-1-yl)-O-(3-pyridylmethyl)carbamate irreversibly inhibits FAAH with an IC₅₀ value of 0.153 μM.¹

References

1. Wu, H., Kelley, C.J., Pino-Figueroa, A., *et al.* Macamides and their synthetic analogs: Evaluation of *in vitro* FAAH inhibition. *Bioorg. Med. Chem.* **21**(17), 5188-5197 (2013).
2. dos Santos, D.S., Piovesan, L.A., D'Oca, C.R.M., *et al.* Antiproliferative activity of synthetic fatty acid amides from renewable resources. *Bioorg. Med. Chem.* **23**(2), 340-347 (2015).

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, 05/01/2024

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