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:	$C_{2a}H_{a0}N_2O_2$
FW:	388.6 N 0
Purity:	≥98% H
UV/Vis.:	λ_{max} : 260 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 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-(3pyridylmethyl)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 μ M.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.

SAFFTY 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.

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