

## Produktinformation



Forschungsprodukte & Biochemikalien
Zellkultur & Verbrauchsmaterial
Diagnostik & molekulare Diagnostik
Laborgeräte & Service

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### Zuschläge

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- 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 <u>mail@szabo-scandic.com</u> www.szabo-scandic.com

# **PRODUCT** INFORMATION



-OH

**N-Oleoyl Proline** 

Item No. 20369

CAS Registry No.:	107432-37-1	_
Formal Name:	1-[(9Z)-1-oxo-9-octadecen-1-yl]-L-proline	1
MF:	C <sub>23</sub> H <sub>41</sub> NO <sub>3</sub>	/
FW:	379.6	1
Purity:	≥95%	$\rightarrow$
Supplied as:	A solution in methyl acetate	_
Storage:	-20°C	
Stability:	As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly	

#### Laboratory Procedures

N-Oleoyl proline is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of N-oleoyl proline in ethanol and DMSO is approximately 12 mg/ml and approximately 10 mg/ml in DMF.

N-Oleoyl proline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-oleoyl proline should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. N-Oleoyl proline has a solubility of approximately 0.2 mg/ml in a 1:4 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-Oleoyl proline is an N-acyl amine that has been detected in bovine brain extracts and D. melanogaster larvae using mass spectrometry.<sup>1,2</sup> In a preclinical model of pain, mice lacking fatty acid amide hydrolase (FAAH KO) had decreased N-oleoyl proline levels in lumbar spinal cord after capsaicin administration  $(1 \mu g/10 \mu l)$ .<sup>3</sup> N-Oleoyl proline also has surfactant properties (critical micelle concentration = 4.8  $\mu$ M).<sup>4</sup>

#### References

- 1. Tan, B., O'Dell, D.K., Yu, Y.W., et al. Identification of endogenous acyl amino acids based on a targeted lipidomics approach. J. Lipid. Res. 51(1), 112-119 (2010).
- 2. Tortoriello, G., Rhodes, B.P., Takacs, S.M., et al. Targeted lipidomics in D. melanogaster identifies novel 2-monoacylglycerols and N-acyl amides. PLoS One 8(7), e67865 (2013).
- Carey, L.M., Slivicki, R.A., Leishman, E., et al. A pro-nociceptive phenotype unmasked in mice lacking 3. fatty-acid amide hydrolase. Mol. Pain 12 (2016).
- 4. Sreenu, M., Nayak, R.R., Prasad, R.B.N., et al. Synthesis, surface and micellar properties of sodium N-oleoyl amino acids. Colloids Surf. A. Physicochem. Eng. Aspects 449, 74-81 (2014).

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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#### 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