

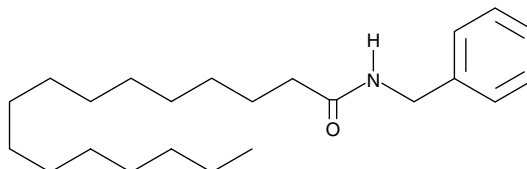
# Product Information



## N-Benzylpalmitamide

Item No. 9002235

**CAS Registry No.:** 74058-71-2  
**Formal Name:** N-(phenylmethyl)-hexadecanamide  
**Synonym:** N-Benzylhexadecanamide  
**MF:** C<sub>23</sub>H<sub>39</sub>NO  
**FW:** 345.6  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

For long term storage, we suggest that N-benzylpalmitamide be stored as supplied at -20°C. It should be stable for at least two years.

N-Benzylpalmitamide is supplied as a crystalline solid. A stock solution may be made by dissolving the N-benzylpalmitamide in the solvent of choice. N-Benzylpalmitamide is soluble in the organic solvent ethanol, which should be purged with an inert gas, at a concentration of approximately 2 mg/ml.

N-Benzylpalmitamide is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

N-Benzylpalmitamide is a long-chain fatty acid amide (macamide or macaene) isolated from the maca (*L. meyenii*) plant and is structurally related to cannabinoids.<sup>1</sup> N-Benzylpalmitamide has been the most frequently isolated of the 19 macamides currently identified. While many macamides have been identified as potent inhibitors of fatty acid amide hydrolase (FAAH), N-benzylpalmitamide displays only moderate FAAH inhibitory activity (44% inhibition at 500 μM).<sup>1</sup> Additionally, many members of this family demonstrate selective antiproliferative activity against diverse cancer cell lines.<sup>2</sup>

### 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).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/9002235](http://www.caymanchem.com/catalog/9002235)

**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.

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