

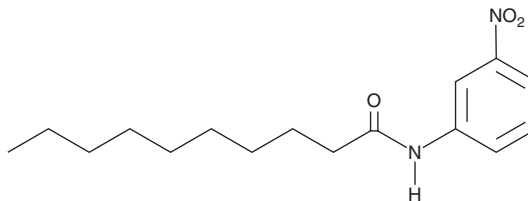
# PRODUCT INFORMATION



## Decanoyl *m*-Nitroaniline

Item No. 90349

**CAS Registry No.:** 72298-61-4  
**Formal Name:** N-(3-nitrophenyl)-decanamide  
**Synonym:** DemNA  
**MF:** C<sub>16</sub>H<sub>24</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 292.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 202, 241 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

Decanoyl *m*-nitroaniline (DemNA) is supplied as a crystalline solid. A stock solution may be made by dissolving the DemNA in an organic solvent, which should be purged with an inert gas. DemNA is soluble in organic solvents such as ethanol, DMSO, and dimethylformamide (DMF). The solubility of DemNA in ethanol is approximately 20 mg/ml and approximately 25 mg/ml in DMSO and DMF.

DemNA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DemNA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. DemNA has a solubility of approximately 0.6 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

DemNA is one of several nitroaniline fatty acid amides which can be used to measure fatty acid amide hydrolase (FAAH) activity.<sup>1</sup> FAAH is a relatively unselective enzyme in that it accepts a variety of amide head groups other than the ethanolamine of its endogenous substrate anandamide (AEA). It also will hydrolyze fatty acid amides with fewer carbons and fewer double bonds than arachidonate. Exposure of DemNA to FAAH activity results in the release of the yellow colorimetric dye *m*-nitroaniline (ε = 13,500 at 410 nm). This allows the fast and convenient measurement of FAAH activity using a 96 well plate spectrophotometer.

### Reference

1. Patricelli, M.P. and Cravatt, B.F. Characterization and manipulation of the acyl chain selectivity of fatty acid amide hydrolase. *Biochemistry* **40**(20), 6107-6115 (2001).

#### 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.

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