

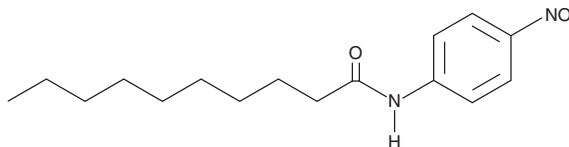
PRODUCT INFORMATION



N-Decanoyl *p*-Nitroaniline

Item No. 10005851

CAS Registry No.: 72298-63-6
Formal Name: N-(4-nitrophenyl)-decanamide
Synonym: DepNA
MF: C₁₆H₂₄N₂O₃
FW: 292.4
Purity: ≥98%
UV/Vis.: λ_{max}: 204, 316 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-Decanoyl *p*-nitroaniline is supplied as a crystalline solid. A stock solution may be made by dissolving the N-decanoyl *p*-nitroaniline in the solvent of choice, which should be purged with an inert gas. N-Decanoyl *p*-nitroaniline is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of N-decanoyl *p*-nitroaniline in ethanol is approximately 20 mg/ml and approximately 25 mg/ml in DMSO and DMF.

N-Decanoyl *p*-nitroaniline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-decanoyl *p*-nitroaniline should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. N-Decanoyl *p*-nitroaniline 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

N-Decanoyl *p*-nitroaniline (DepNA) is one of several nitroaniline fatty acid amides which can be used to measure fatty acid amide hydrolase (FAAH) activity.¹ 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 DepNA to FAAH activity results in the release of the yellow colorimetric dye *p*-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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