

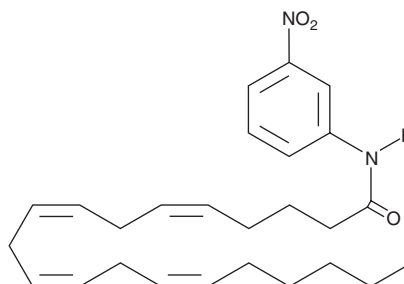
# PRODUCT INFORMATION



## Arachidonoyl *m*-Nitroaniline

Item No. 90059

**CAS Registry No.:** 1175954-87-6  
**Formal Name:** N-(3-nitrophenyl)-5Z,8Z,11Z,14Z-eicosatetraenamide  
**Synonym:** AmNA  
**MF:** C<sub>26</sub>H<sub>36</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 424.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 203, 242 nm  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Arachidonoyl *m*-Nitroaniline (AmNA) 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 purged with an inert gas can be used. The solubility of AmNA in these solvents is approximately 50 mg/ml.

AmNA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of AmNA should be diluted with the aqueous buffer of choice. AmNA has a solubility of approximately 1 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

AmNA 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 nominal endogenous substrate anandamide (arachidonoyl ethanolamide; AEA). It also will hydrolyze fatty acid amides with fewer carbons and fewer double bonds than arachidonate (see also Decanoyl *m*-Nitroaniline; Item No. 90349). Exposure of AmNA to FAAH activity results in the release of the yellow colorimetric dye *m*-nitroaniline ( $\epsilon = 13,500$  at 410 nm). This offers the potential for fast and convenient measurements 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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