

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** AM 404 (in Tocrisolve™ 100)

**Catalog No.:** 1685

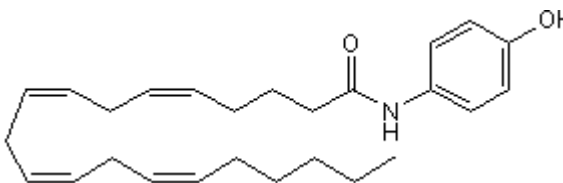
**Batch No.:** 4

CAS Number: 198022-70-7

IUPAC Name: *N*-(4-Hydroxyphenyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>26</sub>H<sub>37</sub>NO<sub>2</sub>  
**Batch Molecular Weight:** 395.58  
**Physical Appearance:** White emulsion  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.0% purity

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**  
info@bio-techne.com  
techsupport@bio-techne.com

**North America**  
Tel: (800) 343 7475

**China**  
info.cn@bio-techne.com  
Tel: +86 (21) 52380373

**Europe Middle East Africa**  
Tel: +44 (0)1235 529449

**Rest of World**  
[www.tocris.com/distributors](http://www.tocris.com/distributors)  
Tel: +1 612 379 2956

**Product Name:** AM 404 (in Tocrisolve™ 100)

**Catalog No.:** 1685

**Batch No.:** 4

CAS Number: 198022-70-7

IUPAC Name: *N*-(4-Hydroxyphenyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

**Description:**

Competitive and selective inhibitor of carrier-mediated anandamide transport ( $IC_{50} = 1 \mu M$ ), in water-soluble emulsion (for details see Tocrisolve™ 100 Cat. No. 1684). Does not activate  $CB_1$  receptors or inhibit anandamide hydrolysis but has been shown to activate native and cloned vanilloid receptors ( $pEC_{50} = 7.4$ ). Active in vivo. Also available as solid AM 404 (Cat. No. 1116).

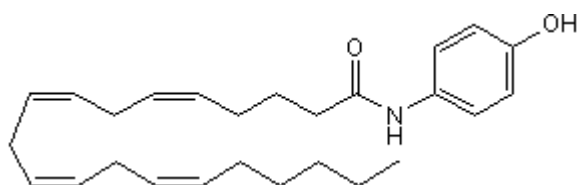
**Physical and Chemical Properties:**

Batch Molecular Formula:  $C_{26}H_{37}NO_2$

Batch Molecular Weight: 395.58

Physical Appearance: White emulsion

**Batch Molecular Structure:**



**References:**

**Beltramo et al** (1997) Functional role of high-affinity anandamide transport, as revealed by selective inhibition. *Science* **277** 1094. PMID: 9262477.

**Calignano et al** (1997) Potentiation of anandamide hypotension by the transport inhibitor, AM 404. *Eur.J.Pharmacol.* **337** R1. PMID: 9389389.

**Piomelli et al** (1999) Structural determinants for recognition and translocation by the anandamide transporter. *Proc.Natl.Acad.Sci.U.S.A.* **96** 5802. PMID: 10318965.

**Zygmunt et al** (2000) The anandamide transport inhibitor AM404 activates vanilloid receptors. *Eur.J.Pharmacol.* **396** 39. PMID: 10822052.

**Storage:** Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

CAUTION - This product must **not** be frozen.

**Stability and Solubility Advice:**

This product must not be frozen and should be stored at +4°C. Provided that the lid is kept tightly sealed this product will be useable for up to one month.

We recommend that diluted solutions of the Tocrisolve product should be used immediately and must not be frozen.

**Other Information:**

This product is supplied dissolved at a concentration of 8 mg/ml in a soya oil / water (1:4) emulsion. The formulation is emulsified with the block co-polymer, Pluronic F68. It can be diluted with any aqueous medium. This product must not be frozen.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956