



Certificate of Analysis

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Product Name: Anandamide (in Tocrisolve™ 100) Catalog No.: 1017 Batch No.: 23

CAS Number: 94421-68-8

IUPAC Name: N-(2-Hydroxyethyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{37}NO_2$ Batch Molecular Weight: 347.54

Physical Appearance: White emulsion Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 98.2% purity



Product Information

Print Date: Jan 30th 2019

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IUPAC Name: N-(2-Hydroxyethyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

Description:

Endogenous cannabinoid and vanilloid receptor agonist, in water-soluble emulsion (for details see TocrisolveTM 100, Cat. No. 1684). K_i values are 89 and 371 nM for CB_1 and CB_2 receptors respectively; EC_{50} values are 18, 31 and 27 nM at GPR55, CB_1 and CB_2 respectively; pK_i = 5.68 for rVR1. Also blocks TNF- α -induced NF-kB activation via direct inhibition of IKK. Available as the pure oil dissolved in ethanol, Anandamine. Tocrisolve Control also available. Please see product datasheet on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₃₇NO₂ Batch Molecular Weight: 347.54 Physical Appearance: White emulsion

Batch Molecular Structure:

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.

Catalog No.: 1017

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 $+4^{\circ}$ 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 8.54 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

INFORMATION FOR CUSTOMERS IN CANADA ONLY

This product is a Schedule II CDSA controlled substance and customers in Canada require an import permit to purchase this material.

References:

Ryberg et al (2007) The orphan receptor GPR55 is a novel cannabinoid receptor. Br.J.Pharmacol. 152 1092. PMID: 17876302.

Sancho *et al* (2003) Anandamide inhibits nuclear factor-κB activation through a cannabinoid receptor-independent pathway. Mol.Pharmacol. *63* 429. PMID: 12527815.

Gardiner *et al* (2002) Complex regional haemodynamic effects of anandamide in conscious rats. Br.J.Pharmacol. *135* 1889. PMID: 11959791.

Kagaya *et al* (2002) Characterization of the anandamide-induced depolarization of guinea-pig isolated vagus nerve. Br.J.Pharmacol. **137** 39. PMID: 12183329.

Ross et al (2001) Structure-activity relationship for the endogenous cannabinoid, anandamide, and certain of its analogues at vanilloid receptors in transfected cells and vas deferens. Br.J.Pharmacol. 132 631. PMID: 11159715.

Pertwee (1999) Pharmacology of cannabinoid receptor ligands. Curr.Med.Chem. 6 635. PMID: 10469884.

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