

## Certificate of Analysis

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**Product Name:** (R)-(+)-Methanandamide (in Tocrisolve™ 100)

**Catalog No.:** 1782

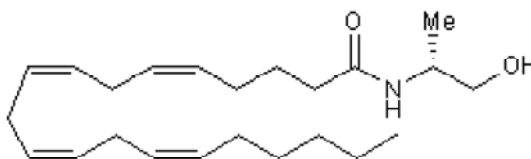
**Batch No.:** 11

**CAS Number:** 157182-49-5

**IUPAC Name:** (R)-N-(2-Hydroxy-1-methylethyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>23</sub>H<sub>39</sub>NO<sub>2</sub>  
**Batch Molecular Weight:** 361.57  
**Physical Appearance:** White emulsion  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 98.8% purity

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

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**Description:**

Stable anandamide analog that is a selective agonist for the CB<sub>1</sub> receptor (K<sub>i</sub> values are 20 and 815 nM for CB<sub>1</sub> and CB<sub>2</sub> receptors respectively), in water-soluble emulsion (for details see Tocrisolve™ 100). Displays agonist activity at vanilloid receptors. (R)-(+)-Methanandamide, pure oil dissolved in ethanol and Tocrisolve Control also available.

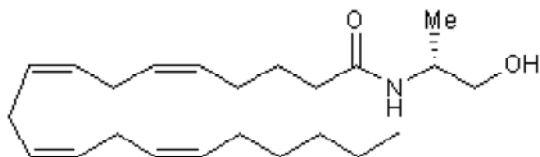
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>23</sub>H<sub>39</sub>NO<sub>2</sub>

Batch Molecular Weight: 361.57

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.

**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 10.1 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.

**References:**

**Zygmunt et al** (1999) Vanilloid receptors on sensory nerves mediate the vasodilator action of anandamide. *Nature* **400** 452. PMID: 10440374.

**Carriero et al** (1998) A detailed characterization of the effects of four cannabinoid agonists on operant lever pressing. *Psychopharmacology (Berl.)* **137** 147. PMID: 9630001.

**Khanolkar et al** (1996) Head group analogs of arachidonylethanolamide, the endogenous cannabinoid ligand. *J.Med.Chem.* **39** 4515. PMID: 8893848.

**Abadji et al** (1994) (R)-Methanandamide: a chiral novel anandamide possessing higher potency and metabolic stability. *J.Med.Chem.* **37** 1889. PMID: 8021930.

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