

Certificate of Analysis

Print Date: Apr 9th 2020

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Product Name: NADA Catalog No.: 1568 Batch No.: 4

CAS Number: 199875-69-9

IUPAC Name: N-[2-(3,4-Dihydroxyphenyl)ethyl]-5Z,8Z,11Z,14Z-eicosatetraenamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₈H₄₁NO₃
Batch Molecular Weight: 439.64
Physical Appearance: Yellow liquid

Solubility: Soluble in ethanol (supplied pre-dissolved in anhydrous ethanol, 5mg/ml)

Storage: Desiccate at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.5$ (Ethyl acetate:Petroleum ether [7:3])

¹H NMR: Consistent with structure



Product Information

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Description:

Potent endogenous cannabinoid and vanilloid receptor agonist, with no action at dopamine receptors. Selective for CB_1 over CB_2 receptors (K_i values are 0.25 and 12 μM respectively), and potent agonist at TRPV1 (VR1) receptors (EC $_{50}~\sim~50$ nM). Metabolically stable and competitively inhibits FAAH and anandamide transport. Has cannabinoid and vanilloid actions in vivo.

Physical and Chemical Properties:

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Batch Molecular Structure:

Storage: Desiccate at -20°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:

Soluble in ethanol (supplied pre-dissolved in anhydrous ethanol, 5mg/ml)

This product is supplied dissolved in anhydrous ethanol at a concentration of 5mg/ml

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Huang *et al* (2002) An endogenous capsaicin-like substance with high potency at recombinant and native vanilloid VR1 receptors. Proc.Natl.Acad.Sci.U.S.A. **99** 8400. PMID: 12060783.

Bisogno et al (2000) N-acyl-DAs: novel synthetic CB₁ cannabinoid-receptor ligands and inhibitors of anandamide inactivation with cannabimimetic activity in vitro and in vivo. Biochem.J. **351** 817. PMID: 11042139.

De Petrocellis *et al* (2000) Overlap between the ligand recognition properties of the anandamide transporter and the VR1 vanilloid receptor: inhibitors of anandamide uptake with negligible capsaicin-like activity. FEBS Lett. **483** 52. PMID: 11033355.