

Certificate of Analysis

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Product Name: STEARDA

Catalog No.: 2204

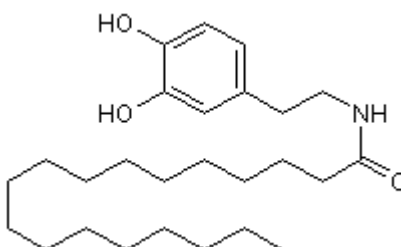
Batch No.: 1

CAS Number: 105955-10-0

IUPAC Name: *N*-[2-(3,4-Dihydroxyphenyl)ethyl]octadecanamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₆H₄₅NO₃
Batch Molecular Weight: 419.64
Physical Appearance: White solid
Solubility: ethanol to 5 mM with gentle warming
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Chloroform:Methanol [95:5])
Melting Point: Between 97 - 99°C
HPLC: Shows >98.5% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	74.42	10.81	3.34
Found	74.42	11.14	2.99

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

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Description:

Endogenous fatty acid dopamide that displays 'entourage' effects on endovanilloids NADA and anandamide. Inactive at TRPV1 and CB₁ receptors (at concentrations up to 5 μM) and does not inhibit AMT or FAAH (IC₅₀ > 25 μM). However, potentiates TRPV1-mediated effects of NADA in vitro and in vivo; enhances effects on intracellular Ca²⁺ (EC₅₀ lowered 3-fold) and nociception. Also inhibits arachidonate 5-lipoxygenase (IC₅₀ = 16 nM).

Physical and Chemical Properties:

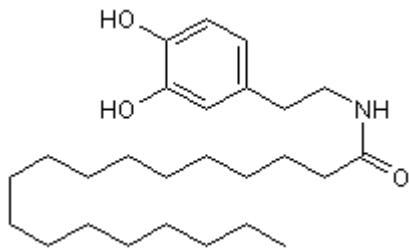
Batch Molecular Formula: C₂₆H₄₅NO₃

Batch Molecular Weight: 419.64

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Chu et al (2003) *N*-Oleoyldopamine, a novel endogenous capsaicin-like lipid that produces hyperalgesia. *J.Biol.Chem.* **278** 13633. PMID: 12569099.

De Petrocellis et al (2004) Actions of two naturally occurring saturated *N*-acyldopamines on transient receptor potential vanilloid 1 (TRPV1) channels. *Br.J.Pharmacol.* **143** 251. PMID: 15289293.

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:

ethanol to 5 mM with gentle warming

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.

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