

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: LG 101506 Catalog No.: 3508 Batch No.: 1

CAS Number: 331248-11-4

IUPAC Name: (2E,4E,6Z)-7-[2-(2,2-Difluoroethoxy)-3,5-bis(1,1-dimethylethyl)phenyl]-3-methyl-2,4,6-octatrienoic acid

Store at +4°C

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{25}H_{34}F_2O_3$ Batch Molecular Weight: 420.53

Physical Appearance: Off-white solid

Solubility: DMSO to 100 mM ethanol to 50 mM

Batch Molecular Structure:

Storage:

2. ANALYTICAL DATA

TLC: $R_f = 0.27$ (Ethyl acetate:Petroleum ether [1:1])

HPLC: Shows 99% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 71.4 8.15 Found 71.24 8.16



Product Information

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Description:

Selective RXR modulator (K_i values are 3, 9 and 11 for RXR α , RXR β and RXR γ respectively). Displays poor binding affinity for RAR isoforms (K_i values are 2746, 3516 and >10,000 nM for RAR α , RAR β and RAR γ respectively). Binding to RXR results in selective activation of RXR:PPAR γ , RXR:PPAR α and RXR:PPAR δ heterodimers.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{25}H_{34}F_2O_3$ Batch Molecular Weight: 420.53 Physical Appearance: Off-white solid

Minimum Purity: >98%

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:

DMSO to 100 mM ethanol to 50 mM

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:

Michellys et al (2003) Novel (2*E*,4*E*,6*Z*)-7-(2-alkoxy-3,5-dialkylbenzene)-3-methylocta-2,4,6-trienoic acid retinoid X receptor modulators are active in models of type 2 diabetes. J.Med.Chem. **46** 2683. PMID: 12801232.

Leibowitz *et al* (2006) Biological characterization of a heterodimer-selective retinoid X receptor modulator: potential benefits for the treatment of type 2 diabetes. Endocrinology *147* 1044. PMID: 16269450.

Pinaire *et al* (2007) Therapeutic potential of retinoid X receptor modulators for the treatment of the metabolic syndrome. PPAR Res. 94156. PMID: 17497022.