# TOCRIS a biotechne brand

# **Certificate of Analysis**

## www.tocris.com

Catalog No.: 2436

Print Date: Jan 15th 2016

Batch No.: 1

Product Name:AC 55649CAS Number:59662-49-6IUPAC Name:4'-Octyl-[1,1'-biphenyl]-4-carboxylic acid

### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:					
Batch Molecular Weight:					
Physical Appearance:					
Solubility:					

**Batch Molecular Structure:** 

 $C_{21}H_{26}O_2$ 310.44 Off-white crystalline solid DMSO to 100 mM ethanol to 25 mM Store at +4°C

HO<sub>2</sub>C

2. ANALYTICAL DATA

Storage:

HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis:

Shows >99.5% purity Consistent with structure Consistent with structure

Carbon Hydrogen Nitrogen

 Theoretical
 81.25
 8.44

 Found
 81.53
 8.5

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

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#### Product Name: AC 55649

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CAS Number: 59662-49-6 IUPAC Name: 4'-Octyl-[1,1'-biphenyl]-4-carboxylic acid

#### **Description:**

Potent, isoform-selective RAR $\beta$ 2 receptor agonist (pEC<sub>50</sub> values are 6.9, 5.7 and 5.6 at RAR $\beta$ 2, RAR $\beta$ 1 and RAR $\alpha$  respectively) that displays 100-fold selectivity versus other retinoid receptors. Inhibits proliferation of the breast cancer cell line MCF-7.

#### **Physical and Chemical Properties:**

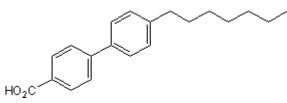
Batch Molecular Formula: C<sub>21</sub>H<sub>26</sub>O<sub>2</sub>

Batch Molecular Weight: 310.44

Physical Appearance: Off-white crystalline solid

#### Minimum Purity: >99%

#### **Batch Molecular Structure:**



#### **Storage:** Store at +4°C

Solubility & Usage Info: DMSO to 100 mM

ethanol to 25 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:

Lund et al (2005) Discovery of a potent, orally available, and isoform-selective retinoic acid β2 receptor agonist. J.Med.Chem. **48** 7517. PMID: 16302793.

Lund et al (2009) Design, synthesis, and structure-activity analysis of isoform selective retinoic acid receptor ligands. J.Med.Chem. 52 1540. PMID: 19239230.

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