

# **Certificate of Analysis**

Print Date: Jan 14<sup>th</sup> 2016 **WWW.tocris.com** 

Product Name: ER 50891 Catalog No.: 3823 Batch No.: 1

CAS Number: 187400-85-7

IUPAC Name: 4-[5-[8-(1-Methylethyl)-4-phenyl-2-quinolinyl]-1*H*-pyrrolo-2-benzoic acid

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{29}H_{24}N_2O_2$ . <sup>1</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 437.01

Physical Appearance: Orange solid
Solubility: DMSO to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 

## 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.39$  (Dichloromethane:Methanol [95:5])

**HPLC:** Shows 100% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 79.7 5.65 6.41 Found 79.77 5.57 6.58



## **Product Information**

Print Date: Jan 14th 2016

www.tocris.com

Product Name: ER 50891 Catalog No.: 3823 Batch No.: 1

CAS Number: 187400-85-7

IUPAC Name: 4-[5-[8-(1-Methylethyl)-4-phenyl-2-quinolinyl]-1*H*-pyrrolo-2-benzoic acid

#### **Description:**

Antagonist of RAR $\alpha$  receptors (IC<sub>50</sub> = 31.2 nM). Displays selective affinity for RAR $\alpha$  (relative IC<sub>50</sub> values are 1.8, 432 and 535 nM for RAR $\alpha$ , RAR $\gamma$  and RAR $\beta$  respectively).

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

Batch Molecular Formula:  $C_{29}H_{24}N_2O_2$ . 1/4  $H_2O$ 

Batch Molecular Weight: 437.01 Physical Appearance: Orange solid

## Minimum Purity: >99%

## **Batch Molecular Structure:**

Storage: Store at RT

#### Solubility & Usage Info:

DMSO to 100 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:

**Kikuchi** et al (2001) Syntheses and evaluation of quinoline derivatives as novel retinoic acid receptor  $\alpha$  antagonists. Bioorg.Med.Chem.Lett. **11** 1215. PMID: 11354380.

Ren et al (2005) Impaired retinoic acid (RA) signal leads to RARβ2 epigenetic silencing and RA resistance. Mol.Cell.Biol. 25 10591. PMID: 16287870.

**Somenzi** *et al* (2007) Disruption of retinoic acid receptor alpha reveals the growth promoter face of retinoic acid. PLoS ONE **9** e836. PMID: 17786207.