

# **Certificate of Analysis**

Print Date: Jan 14th 2016

www.tocris.com

Product Name: IQ 1 Catalog No.: 4713 Batch No.: 1

CAS Number: 331001-62-8

IUPAC Name: 2-[2-(4-Acetylphenyl)diazenyl]-2-(3,4-dihydro-3,3-dimethyl-1(2H)-isoquinolinylidene)acetamide

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{21}H_{22}N_4O_2$ 

Batch Molecular Weight: 362.42

Physical Appearance: Orange solid
Solubility: DMSO to 100 mM

ethanol to 20 mM

Storage: Store at -20°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 69.59 6.12 15.46 Found 69.43 6.13 15.53



# **Product Information**

Print Date: Jan 14<sup>th</sup> 2016

www.tocris.com

Product Name: IQ 1 Catalog No.: 4713 Batch No.: 1

CAS Number: 331001-62-8

IUPAC Name: 2-[2-(4-Acetylphenyl)diazenyl]-2-(3,4-dihydro-3,3-dimethyl-1(2H)-isoquinolinylidene)acetamide

### **Description:**

Maintains embryonic stem cell (ESC) pluripotency in Wnt3a-treated cells; enables Wnt/ $\beta$ -catenin-driven expansion of mouse ESCs and prevents spontaneous differentiation. Upregulates expression of Oct4 and Sox2 transcription factors. Binds to serine/threonine phosphatase PP2A and prevents PP2A/Nkd interaction.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub> Batch Molecular Weight: 362.42 Physical Appearance: Orange solid

Minimum Purity: >99%

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

Storage: Store 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:

DMSO to 100 mM ethanol to 20 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:

**Miyabayashi** *et al* (2007) Wnt/beta-catenin/CBP signaling maintains long-term murine embryonic stem cell pluripotency. Proc.Natl.Acad.Sci.U S A *104* 5668. PMID: 17372190.