Certificate of Analysis

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Print Date: Mar 17th 2022

O4I2 Product Name:

a **biotechne** b

TOCRIS

CAS Number: 165682-93-9 IUPAC Name: Ethyl 2-[(4-chlorophenyl)amino]-4-thiazolecarboxylate

1. PHYSICAL AND CHEMICAL PROPERTIES

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

C₁₂H₁₁CIN₂O₂S.¹/₄H₂O 287.25 Yellow solid DMSO to 100 mM ethanol to 50 mM Store at -20°C

Storage: **Batch Molecular Structure:**

K S NH ol

2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: Microanalysis:

Shows 98.6% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen Theoretical 50.18 4.04 9.75 Found 50.09 3.7 9.69

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

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Catalog No.: 5664 Batch No.: 1

TOCRIS a biotechne brand

Product Information

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Print Date: Mar 17th 2022

Product Name: O4I2

Catalog No.: 5664

Batch No.: 1

CAS Number: 165682-93-9 IUPAC Name: Ethyl 2-[(4-chlorophenyl)amino]-4-thiazolecarboxylate

Description:

O4I2 is an Oct3/4 inducer; promotes Oct3/4 expression and stabilizes the Oct3/4 protein in HEK293 cells. Induces expression of pluripotent-associated genes Lin28, Sox2 and Nanog, and suppresses Rex1. Induces 15-fold increase in Oct3/4 expression in human primary fibroblasts.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₂H₁₁ClN₂O₂S.¹/₄H₂O Batch Molecular Weight: 287.25 Physical Appearance: Yellow solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at -20°C

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 $45-60^{\circ}C$ 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:

Cheng *et al* (2015) Ethyl 2-((4-Chlorophenyl)amino)thiazole-4-carboxylate and derivatives are potent inducers of Oct3/4. J.Med.Chem. **58** 5742. PMID: 26143659.

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