

# **Certificate of Analysis**

Print Date: Jun 10th 2016

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Product Name: PBIT Catalog No.: 5930 Batch No.: 1

CAS Number: 2514-30-9

IUPAC Name: 2-(4-Methylphenyl)-1,2-benzisothiazol-3(2*H*)-one

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C<sub>14</sub>H<sub>11</sub>NOS

Batch Molecular Weight: 241.31

Physical Appearance: Off White solid
Solubility: DMSO to 100 mM

ethanol to 20 mM

Storage: Store at +4°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: Corbon Hydrog

Carbon Hydrogen Nitrogen

Theoretical 69.68 4.59 5.8 Found 69.77 4.74 5.8



# **Product Information**

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#### **Description:**

JARID1 (Jumonji AT-Rich Interactive Domain 1) inhibitor ( $IC_{50}$  values are 3, 4.9 and 6  $\mu$ M for JARID1B, 1A and 1C, respectively). Selective for JARID1 over UTX and JMJD3. Increases levels of methylated H3K4 in JARIDB1-transfected HeLa cells and MCF7 cells. Inhibits proliferation of breast cancer cell lines expressing high levels of JARIDB1.

# **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>14</sub>H<sub>11</sub>NOS Batch Molecular Weight: 241.31 Physical Appearance: Off White solid

Minimum Purity: >98%

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

Storage: Store at +4°C

### 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:

**Sayegh** *et al* (2013) Identification of small molecule inhibitors of Jumonji AT-rich interactive domain 1B (JARID1B) histone demethylase by a sensitive high throughput screen. J.Biol.Chem. *288* 9408. PMID: 23408432.