# biotechne<sup>®</sup> TOCRIS

# Print Date: May 17<sup>th</sup> 2024

Catalog No.: 4406

# **Certificate of Analysis**

# www.tocris.com

Batch No.: 1

### Product Name: 10058-F4

CAS Number: 403811-55-2 IUPAC Name: 5-[(4-Ethylphenyl)methylene]-2-thioxo-4-thiazolidinone

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: C<sub>12</sub>H<sub>11</sub>NOS<sub>2</sub> 249.35 Yellow solid DMSO to 100 mM ethanol to 20 mM Store at +4°C

Storage: **Batch Molecular Structure:** 

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## 2. ANALYTICAL DATA

HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis: Shows 99.4% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen

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Theoretical	57.8	4.45	5.62
Found	57.61	4.58	5.65

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

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## Product Name: 10058-F4

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### **Description:**

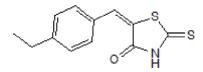
10058-F4 is a cell permeable c-Myc-Max dimerization inhibitor. Inhibits proliferation, induces apoptosis and arrests cells in  $G_0/G_1$  in rat1a-c-Myc cells. Also reduces tumor growth in vivo. In lymphoma cells, 10058-F4 decreases glucose uptake and expression of glycolysis-associated genes and reduces cell viability.

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

Batch Molecular Formula: C<sub>12</sub>H<sub>11</sub>NOS<sub>2</sub> Batch Molecular Weight: 249.35 Physical Appearance: Yellow solid

Minimum Purity: ≥99%

**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  $45-60^{\circ}C$  water bath).

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Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:**

**Broecker-Preuss** *et al* (2017) Regulation of glucose uptake in lymphoma cell lines by c-MYC- and PI3K-dependent signaling pathways and impact of glycolytic pathways on cell viability J.Transl.Med. **15** 158. PMID: 28724379.

**Guo** *et al* (2009) Efficacy, pharmacokinetics, tisssue distribution, and metabolism of the Myc-Max disruptor, 10058-F4 [Z,E] -5-[4-ethylbenzylidine]-2-thioxothiazolidin-4-one, in mice. Cancer Chemother.Pharmacol. **63** 615. PMID: 18509642.

**Huang** *et al* (2006) A small-molecule c-Myc inhibitor, 10058-F4, induces cell-cycle arrest, apoptosis, and myeloid differentiation of human acute myeloid leukemia. Exp.Hematol. **34** 1480. PMID: 17046567.

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