

**Product Name:** AI-3

**Catalog No.:** 5145

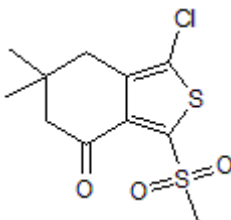
**Batch No.:** 1

CAS Number: 882288-28-0

IUPAC Name: 1-Chloro-6,7-dihydro-6,6-dimethyl-3-(methylsulfonyl)-benzo[*c*]thiophen-4(5*H*)-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>11</sub>H<sub>13</sub>ClO<sub>3</sub>S<sub>2</sub>  
**Batch Molecular Weight:** 292.8  
**Physical Appearance:** Off-white solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 50 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 99.2% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon Hydrogen Nitrogen		
Theoretical	45.12	4.48	
Found	44.93	4.38	

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

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**Description:**

Antioxidant response element (ARE) activator; disrupts Nrf2/Keap1 and Keap1/Cul3 interactions and stabilizes Nrf2. Activates ARE in an Nrf2 and PI 3-kinase dependent manner. Induces cytoprotective gene expression in vitro and in vivo.

**Physical and Chemical Properties:**

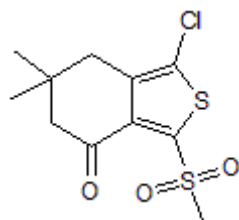
Batch Molecular Formula: C<sub>11</sub>H<sub>13</sub>ClO<sub>3</sub>S<sub>2</sub>

Batch Molecular Weight: 292.8

Physical Appearance: Off-white solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

**Wang et al** (2013) In vitro and in vivo characterization of a tunable dual-reactivity probe of the Nrf2-ARE pathway. *ACS Chem.Biol.* **8** 1764. PMID: 23773140.

**Storage:** Store at +4°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°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.

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