

**Product Name:** Apoptosis Activator 2

**Catalog No.:** 2098

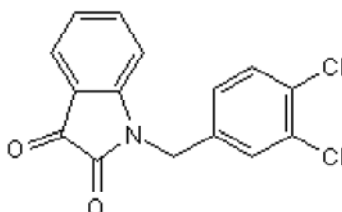
**Batch No.:** 1

CAS Number: 79183-19-0

IUPAC Name: 1-[(3,4-Dichlorophenyl)methyl]-1*H*-indole-2,3-dione

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>15</sub>H<sub>9</sub>Cl<sub>2</sub>NO<sub>2</sub>  
**Batch Molecular Weight:** 306.14  
**Physical Appearance:** Orange solid  
**Solubility:** ethanol to 5 mM  
 DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.44 (Ethyl acetate:Petroleum ether [1:2])  
**Melting Point:** At 185°C  
**HPLC:** Shows 99.6% purity  
<sup>1</sup>H NMR: Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	58.85	2.96	4.58
Found	58.84	2.9	4.41

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

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**Description:**

Apoptosis activator; promotes the cytochrome c-dependent oligomerization of Apaf-1 into the mature apoptosome. Increases procaspase-9 processing and subsequent caspase-3 activation. Induces apoptosis in tumor cells ( $IC_{50}$  = 4 - 9  $\mu$ M for leukemia cells) with weak or no effect on normal cell lines or those defective/deficient in Apaf-1, caspase-9 or caspase-3 activity ( $IC_{50}$  > 40  $\mu$ M).

**Physical and Chemical Properties:**

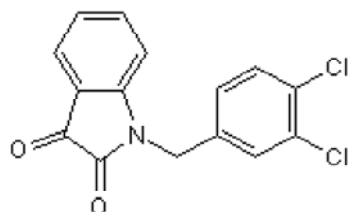
Batch Molecular Formula:  $C_{15}H_9Cl_2NO_2$

Batch Molecular Weight: 306.14

Physical Appearance: Orange solid

**Minimum Purity:**  $\geq 99\%$

**Batch Molecular Structure:**



**References:**

**Alavian et al** (2009) Elevtaed p75NTR expression causes death of engrailed-deficient midbrain DArgic neurons by Erk1/2 suppression. *Neural Dev.* **4** 11. PMID: 19291307.

**Jayaraman and Pike** (2009) Progesterone attenuates oestrogen neuroprotection via downregulation of oestrogen receptor expression in cultured neurones. *J.Neuroendocrinol.* **21** 77. PMID: 19094096.

**Nguyen and Wells** (2003) Direct activation of the apoptosis machinery as a mechanism to target cancer cells. *Proc.Natl.Acad.Sci.USA* **100** 7533.

**Storage:** Store at RT

**Solubility & Usage Info:**

ethanol to 5 mM

DMSO to 100 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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