

Product Data Sheet

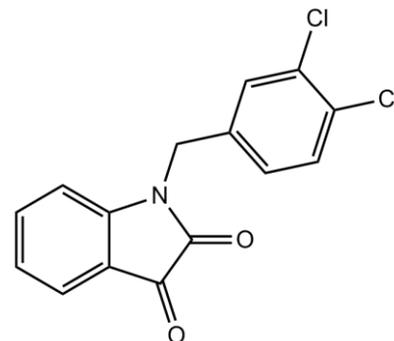
Chemical Properties

Product Name: Apoptosis Activator 2

Cas No.: 79183-19-0

M.Wt: 306.1

Formula: C₁₅H₉Cl₂NO₂



Chemical Name: 1-[(3,4-dichlorophenyl)methyl]indole-2,3-dione

Canonical SMILES: C1=CC=C2C(=C1)C(=O)C(=O)N2CC3=CC(=C(C=C3)Cl)Cl

Solubility: Soluble in DMSO > 10 mM

Storage: Store at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets : Apoptosis

Pathways: Caspase

Description:

Apoptosis Activator 2 is a small molecule apoptosis activator with IC₅₀ value of about 4μM [1]. Apoptosis Activator 2 is a cell permeable compound that promotes apoptosis by activating caspases in a cytochrome c- and Apaf-1-dependent manner. 20μM Apoptosis Activator 2 increases the fraction of Apaf-1 in the apoptosome when there is 0.15μM cytochrome c. It is found to induce the oligomerization of Apaf-1. Through the induction of apoptosis, Apoptosis Activator 2 notably induces caspase-3 activation, PARP cleavage and DNA fragmentation. Moreover, this induction of apoptosis only occurs in tumor cell lines (such as breast, lung, colon,

and epidermal cancer cell lines). Normal cell lines are resistant to Apoptosis Activator 2 [1, 2].

Reference:

[1] Nguyen JT, Wells JA. Direct activation of the apoptosis machinery as a mechanism to target cancer cells. *Proc Natl Acad Sci U S A*. 2003 Jun 24;100(13):7533-8.

[2] Nguyen TV, Jayaraman A, Quaglino A, Pike CJ. Androgens selectively protect against apoptosis in hippocampal neurones. *J Neuroendocrinol*. 2010 Sep;22(9):1013-22.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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