

Certificate of Analysis

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Product Name: DIM

Catalog No.: 4502

Batch No.: 1

CAS Number: 1968-05-4

IUPAC Name: 3,3'-Methylenediindole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₇H₁₄N₂·0.1H₂O

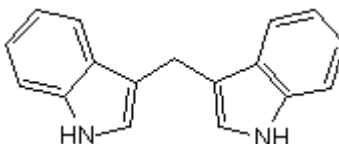
Batch Molecular Weight: 248.11

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM
ethanol to 50 mM

Storage: Store at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

Melting Point: Between 164 - 165°C

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	82.3	5.69	11.29
Found	82.14	5.68	11.31

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

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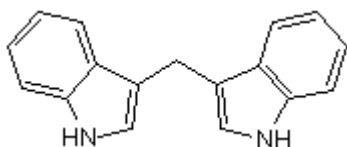
Description:

Activator of Chk2 that causes G₂/M cell cycle arrest in various cancer cell lines. Antiproliferative and inducer of apoptosis; promotes proteasomal degradation of Cdc25C and Cdk1. Inhibits phosphorylation of EGFR and downstream activation of ERK.

Physical and Chemical Properties:Batch Molecular Formula: C₁₇H₁₄N₂·0.1H₂O

Batch Molecular Weight: 248.11

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Minimum Purity: >99%**Batch Molecular Structure:****References:**

Kandala *et al* (2012) Blocking epidermal growth factor receptor activation by 3,3'-diindolylmethane suppresses ovarian tumor growth in vitro and in vivo. *J.Pharmacol.Exp.Ther.* **341** 24. PMID: 22205686.

Shorey *et al* (2012) 3,3'-diindolylmethane induces G₁ arrest and apoptosis in human acute T-cell lymphoblastic leukemia cells. *PLoS One.* **7** e34975. PMID: 22514694.

Kandala & Srivastava (2010) Activation of checkpoint kinase 2 by 3,3'-diindolylmethane is required for causing G₂/M cell cycle arrest in human ovarian cancer cells. *Mol.Pharmacol.* **78** 297. PMID: 20444961.

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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