

## Certificate of Analysis

**Product Name:** Bisindolylmaleimide II

**Catalog No.:** 4128

**Batch No.:** 1

CAS Number: 137592-45-1

IUPAC Name: 3-(1*H*-Indol-3-yl)-4-[1-[2-(1-methyl-2-pyrrolidinyl)ethyl]-1*H*-indol-3-yl]-1*H*-pyrrole-2,5-dione

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>27</sub>H<sub>26</sub>N<sub>4</sub>O<sub>2</sub>·½H<sub>2</sub>O

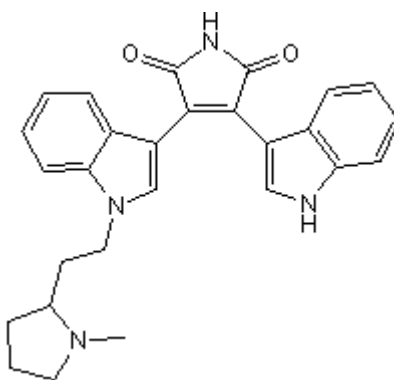
**Batch Molecular Weight:** 447.53

**Physical Appearance:** Orange solid

**Solubility:** DMSO to 100 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.41 (Dichloromethane:Methanol:Triethylamine [0.5:9.5:0.]

**HPLC:** Shows 97.2% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	72.63	5.87	12.55
Found	72.66	5.92	12.65

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

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**Description:**

Potent, ATP-competitive protein kinase C (PKC) inhibitor (IC<sub>50</sub> = 0.01 μM). Displays selectivity for PKC over protein kinase A (PKA) and phosphorylase kinase (PK) (IC<sub>50</sub> values are 0.75 and 2μM for PK and PKA respectively). Also displays potent, noncompetitive antagonism at nicotinic cholinergic receptors (IC<sub>50</sub> ~ 0.03 μM for inhibition of catecholamine secretion in nicotine-stimulated PC-12 cells).

**Physical and Chemical Properties:**

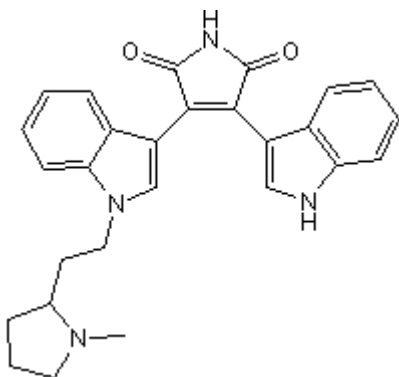
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Batch Molecular Weight: 447.53

Physical Appearance: Orange solid

**Minimum Purity:** >97%

**Batch Molecular Structure:**



**References:**

**Toullec et al** (1991) The bisindolylmaleimide GF 109203X is a potent and selective inhibitor of protein kinase C. *J.Biol.Chem.* **266** 15771. PMID: 1874734.

**Mahata et al** (2002) Chromaffin cell catecholamine secretion: bisindolylmaleimide compounds exhibit novel and potent antagonist effects at the nicotinic cholinergic receptor in pheochromocytoma cells. *Mol.Pharmacol.* **61** 1340. PMID: 12021395.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

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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