

**Product Name:** GF 109203X

**Catalog No.:** 0741

**Batch No.:** 6

CAS Number: 133052-90-1

IUPAC Name: 2-[1-(3-Dimethylaminopropyl)indol-3-yl]-3-(indol-3-yl) maleimide

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>25</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>·¼H<sub>2</sub>O

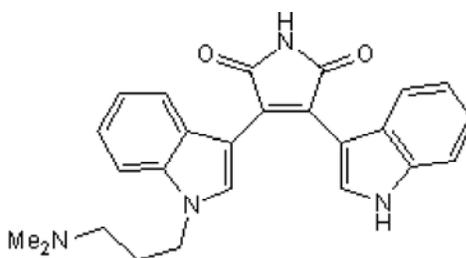
**Batch Molecular Weight:** 416.99

**Physical Appearance:** Orange solid

**Solubility:** DMSO to 25 mM

**Storage:** Store at RT

**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.09 (Chloroform:Methanol [9:1])

**HPLC:** Shows 98.0% purity

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

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	72.01	5.92	13.44
Found	71.85	6.03	13.06

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**Description:**

Very potent and selective inhibitor of protein kinase C, selective for the  $\alpha$  and  $\beta 1$  isoforms ( $IC_{50}$  values are 0.0084, 0.0180, 0.210, 0.132, and 5.8  $\mu$ M for  $\alpha$ ,  $\beta 1$ ,  $\delta$ ,  $\epsilon$  and  $\zeta$  isoforms respectively). Selective over MLCK, PKG and PKA ( $IC_{50}$  values are 0.6, 4.6, and 33  $\mu$ M respectively). Potent antagonist at the 5-HT<sub>3</sub> receptor ( $K_i$  = 29.5 nM). Anti-inflammatory in vivo.

**Physical and Chemical Properties:**

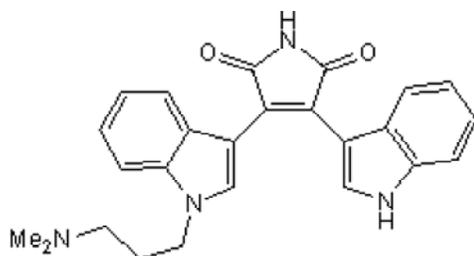
Batch Molecular Formula: C<sub>25</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>·1/4H<sub>2</sub>O

Batch Molecular Weight: 416.99

Physical Appearance: Orange solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 25 mM

When purchased as a 1mg unit, this product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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.

**References:**

**Jiang et al** (2011) Heat shock protein 90-mediated inactivation of nuclear factor- $\kappa$ B switches autophagy to apoptosis through *becn1* transcriptional inhibition in selenite-induced NB4 cells. *Mol.Biol.Cell.* **22** 1167. PMID: 21346199.

**Coultrap et al** (1999) Competitive antagonism of the mouse 5-hydroxytryptamine<sub>3</sub> receptor by bisindolylmaleimide I, a "selective" protein kinase C inhibitor. *J.Pharmacol.Exp.Ther.* **290** 76. PMID: 10381762.

**Jacobson et al** (1995) Anti-inflammatory properties of Go 6850: a selective inhibitor of protein kinase C. *J.Pharmacol.Exp.Ther.* **275** 995. PMID: 7473193.

**Martiny-Baron et al** (1993) Selective inhibition of protein kinase C isozymes by the indolocarbazole Go 6976. *J.Biol.Chem.* **268** 9194. PMID: 8486620.

**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.

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