

Product Name: GF 109203X

Catalog No.: 0741

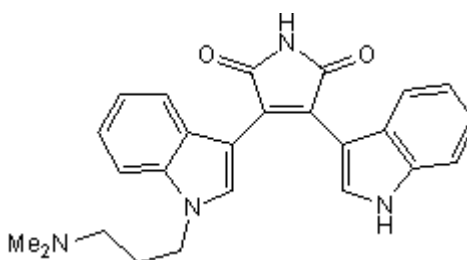
Batch No.: 6

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: $C_{25}H_{24}N_4O_2 \cdot \frac{1}{4}H_2O$
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: $R_f = 0.09$ (Chloroform:Methanol [9:1])
HPLC: Shows 98.0% purity
¹H 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

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

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Description:

Very potent and selective inhibitor of protein kinase C, selective for the α and $\beta 1$ isoforms (IC_{50} values are 0.0084, 0.0180, 0.210, 0.132, and 5.8 μ M for α , $\beta 1$, δ , ϵ and ζ isoforms respectively). Selective over MLCK, PKG and PKA (IC_{50} values are 0.6, 4.6, and 33 μ M respectively). Potent antagonist at the 5-HT₃ receptor (K_i = 29.5 nM). Anti-inflammatory in vivo.

Physical and Chemical Properties:

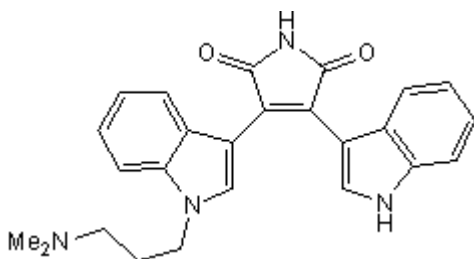
Batch Molecular Formula: C₂₅H₂₄N₄O₂ · ¼H₂O

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

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:

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.

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

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.

Coultrap et al (1999) Competitive antagonism of the mouse 5-hydroxytryptamine₃ receptor by bisindolylmaleimide I, a "selective" protein kinase C inhibitor. *J.Pharmacol.Exp.Ther.* **290** 76. PMID: 10381762.

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

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