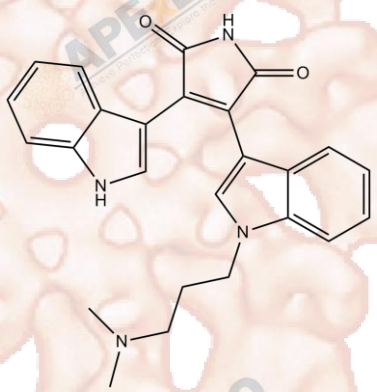
Product Data Sheet

GF 109203X



Cat. No.:	A8342
CAS No.:	133052-90-1
Formula:	C25H24N4O2
M.Wt:	412.49
Synonyms:	Gö 6850;Bisindolylmaleimide I
Target:	TGF-β / Smad Signaling
Pathway:	PKC
Storage:	Store at RT

Solvent & Solubility

In Vitro

insoluble in EtOH; insoluble in H2O; ⩾20.6 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.4243 mL	12.1215 mL	24.2430 mL
5 mM	0.4849 mL	2.4243 mL	4.8486 mL
10 mM	0.2424 mL	1.2122 mL	2.4243 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Protein kinase C,MLCK,PKG and PKA inhibitor
IC_{50} & Target	20 nM (PKCα), 17 nM (PKCβI), 16 nM (PKCβII), 20 nM (PKCγ)

In Vitro

Cell Viability Assay

Cell Line:	human platelets, Swiss 3T3 fibroblasts
Preparation method:	The solubility of this compound in DMSO > 20.6mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	human platelets: 500 nM, 1min

	Applications:	GF 109203X inhibited diC8-stimulated P47 phosphorylation in human platelets. Half-maximal inhibition (IC50) for protein kinase C (PKC) is obtained at 190nM (1 min) in human platelets. GF 109203X inhibited collagen-triggered ATP secretion as well as α- thrombin- and collagen- induced platelet aggregation. GF109203X could inhibit EGF receptor transmodulation in Swiss 3T3 Cells. GF 109203X completely reversed the inhibitory effect of PDBu with a half-maxima effect at 0.9μm in Swiss 3T3 fibroblasts.
In Vivo	**Animal experiment**	
	Animal models:	Wistar rats
	Dosage form:	10 μg in 10% DMSO in saline by intraplantar (i.pl.) injection.
	Applications:	GF109203X abolished the mechanical allodynia induced by BK (bradykinin).
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Liu MF, Xue Y, et al. "Orexin-A Exerts Neuroprotective Effects via OX1R in Parkinson's Disease." Front Neurosci. 2018 Nov 15;12:835.PMID:30524223

See more customer validations on www.apexbt.com.

References

[1] Toullec D, Pianetti P, Coste H, et al. The bisindolylmaleimide GF 109203X is a potent and selective inhibitor of protein kinase C. J Biol Chem, 1991, 266(24): 15771-15781.
[2] Souza AL, Moreira FA, et al. In vivo evidence for a role of protein kinase C in peripheral nociceptive processing. Br J Pharmacol. 2002, 135(1), 239-247.

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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