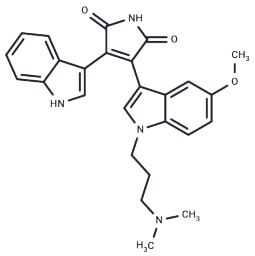
Data Sheet (Cat.No.T6313)

TargetMol

Go 6983

Chemical Properties



CAS No. : 133053-19-7

Formula: C26H26N4O3

Molecular Weight: 442.51

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Go 6983 is a PKC inhibitor with IC50 values of 7, 7, 6, 10, and 60 nM for PKCα, PKCβ, PKCγ, PKCδ, and PKCζ, respectively. Go 6983 has antitumor activity, cardiovascular protection, and protein kinase C inhibition.
Targets(IC50)	PKC
In vitro	**METHODS**: A375, SK-MEL-28, and mouse B16-F10 cells were treated with Go 6983 (0, 0.625, 1.25, 2.5, 5, 10, 20 or 40 μM) for 24, 48, and 72 hours, and the cell growth inhibition was detected by ELISA assay. **RESULTS**: The IC50 values of Go 6983, Go 6983 (Go 6983) at 24, 48 and 72 hours were 58.64, 22.07 and 12.93 μM, respectively. [1]
In vivo	**METHODS**: To study the antitumor activity of Go 6983, MDA-MB-231 cells or PBS were injected into the humeral metaphysis of each mouse, and 14 days later Go 6983 (2.5 and 5 mg/Kg) was injected intraperitoneally to nude mice for 28 days. **RESULTS**: Go 6983 inhibited osteolysis in breast cancer cells. [1]
Kinase Assay	Phosphorylation reactions are carried out in a total volume of 100 μL, containing buffer C (50 mM Tris-HCl, pH 7.5, 10 mM β-mercaptoethanol), 4 mM MgCl2, 10 μg PS, 100 nM TPA, 5 μL of a Sf158 cell extract as a source of recombinant PKCμ or of Sf9 cell extracts as a source of other recombinant PKC isoenzymes, 10 μg of syntide 2 as substrate, and 35 μM ATP containing 1 μCi [γ-32P]ATP. In some experiments, PS and TPA are omitted or various inhibitors at concentrations indicated in the text are added. After incubation for 10 min at 30°C, the reaction is terminated by transferring 50 μL of the assay mixture onto a 20 mm square piece of phosphocellulose paper, which is washed 3 times in deionized water and twice in acetone. The radioactivity on each paper is determined by liquid scintillation counting.

Solubility Information

Solubility	DMSO: 22.1 mg/mL (49.94 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	5% DMSO+40% PEG400+5% Tween80+50% Saline: 10 mg/mL (22.6 mM),Suspension. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and*

In vivo Formulation	*used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2598 mL	11.2992 mL	22.5984 mL
5 mM	0.452 mL	2.2598 mL	4.5197 mL
10 mM	0.226 mL	1.1299 mL	2.2598 mL
50 mM	0.0452 mL	0.226 mL	0.452 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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