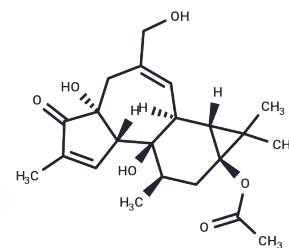


Prostratin

Chemical Properties

CAS No. :	60857-08-1
Formula:	C22H30O6
Molecular Weight:	390.47
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Prostratin (12-Deoxyphorbol-13-acetate) is an orally active protein kinase C (PKC) activator with a K_i value of 12.5 nM. As an NF- κ B activator, Prostratin activates HIV gene expression in T cells. Prostratin inhibits the growth of acute myeloid leukemia (AML) cell lines and enhances cytarabine-induced AML cell differentiation. In addition, Prostratin induced KRAS phosphorylation and inhibited the growth of KRAS-mutated tumors.
Targets(IC50)	NF- κ B, HIV Protease, PKC, Ras, Kras
In vitro	Methods: Prostratin (125, 250, 500, 1000 nM) was used to treat HL-60, NB4, and U937 cells to evaluate its effect on leukemia cell growth. Results: Prostratin showed similar concentration- and time-dependent growth inhibition on all three cell lines. [2]

Solubility Information

Solubility	DMSO: 40 mg/mL (102.44 mM), Sonication is recommended. H2O: < 1 mg/mL (insoluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1.5 mg/mL (3.84 mM), Sonication is recommended. <i>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 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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.561 mL	12.8051 mL	25.6102 mL
5 mM	0.5122 mL	2.561 mL	5.122 mL
10 mM	0.2561 mL	1.2805 mL	2.561 mL
50 mM	0.0512 mL	0.2561 mL	0.5122 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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- Wang H, Zhu X, Zhu Y, Liu J, Hu X, Wang Y, Peng S, Chen Y, Chen R, Ding F, Liu R. Protein kinase D3 is essential for prostratin-activated transcription of integrated HIV-1 provirus promoter via NF- κ B signaling pathway. *Biomed Res Int.* 2014;2014:968027. doi: 10.1155/2014/968027. Epub 2014 Jul 21. PubMed PMID: 25136641; PubMed Central PMCID: PMC4127265.
- Chan JK, Bhattacharyya D, Lassen KG, Ruelas D, Greene WC. Calcium/calcineurin synergizes with prostratin to promote NF- κ B dependent activation of latent HIV. *PLoS One.* 2013 Oct 30;8(10):e77749. doi: 10.1371/journal.pone.0077749. eCollection 2013. PubMed PMID: 24204950; PubMed Central PMCID: PMC3813743.

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