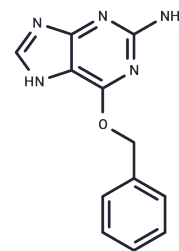


O6-Benzylguanine

Chemical Properties

CAS No. :	19916-73-5
Formula:	C ₁₂ H ₁₁ N ₅ O
Molecular Weight:	241.25
Storage:	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	O6-Benzylguanine is a guanine analog with antineoplastic activity, and is a potent O6-alkylguanine DNA alkyltransferase (AGT) inactivator.
Targets(IC50)	Apoptosis, DNA Alkylation, DNA/RNA Synthesis

Solubility Information

Solubility	DMSO: 245 mg/mL (1015.54 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (41.45 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (41.45 mM), Solution. <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	4.1451 mL	20.7254 mL	41.4508 mL
5 mM	0.829 mL	4.1451 mL	8.2902 mL
10 mM	0.4145 mL	2.0725 mL	4.1451 mL
50 mM	0.0829 mL	0.4145 mL	0.829 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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Dolan M E , Pegg A E . O6-Benzylguanine and its role in chemotherapy[J]. Clinical Cancer Research, 1997, 3(6):837-847.

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