

## 6-(Dimethylamino)purine

## Chemical Properties

CAS No. : 938-55-6

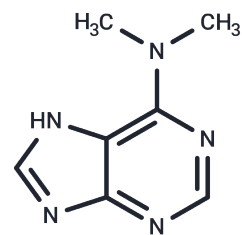
Formula: C<sub>7</sub>H<sub>9</sub>N<sub>5</sub>

Molecular Weight: 163.18

Store at low temperature

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	6-(Dimethylamino)purine (N,N-Dimethyladenine) is a serine threonine protein kinase and CDK inhibitor
Targets(IC50)	Apoptosis,CDK,DNA/RNA Synthesis,Serine/threonin kinase
In vitro	The apoptosis was induced by 6-dimethylaminopurine(6-DMAP) in a dose- and time-dependent manner and treatment for 16 h at a concentration of 5 mM induced apparent DNA fragmentation, phosphatidylserine externalization and lowering of the mitochondrial membrane potential, which are typical markers of apoptosis[1].

## Solubility Information

Solubility	DMSO: 32 mg/mL (196.1 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (12.26 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

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	1mg	5mg	10mg
1 mM	6.1282 mL	30.641 mL	61.282 mL
5 mM	1.2256 mL	6.1282 mL	12.2564 mL
10 mM	0.6128 mL	3.0641 mL	6.1282 mL
50 mM	0.1226 mL	0.6128 mL	1.2256 mL

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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

Nakashima M , Cui Z G , Tabuchi Y , et al. Apoptosis induced by an alkylated purine, 6-dimethylaminopurine, and changes in gene expression in human lymphoma U937 cells[J]. Anticancer research, 2008, 28(2A):609-620.

Neant I , Guerrier P . 6-Dimethylaminopurine blocks starfish oocyte maturation by inhibiting a relevant protein kinase activity[J]. Experimental Cell Research, 1988, 176(1):0-79.

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