Purine

Cat. No.: HY-34431

CAS No.: 120-73-0

Molecular Formula: $C_5H_4N_4$

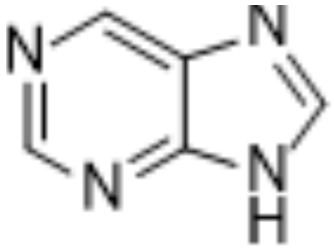
Molecular Weight: 120.11

Target: Endogenous Metabolite; PARP

Pathway: Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Epigenetics

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (416.29 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	8.3257 mL	41.6285 mL	83.2570 mL
5 mM	1.6651 mL	8.3257 mL	16.6514 mL
10 mM	0.8326 mL	4.1629 mL	8.3257 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (20.81 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (20.81 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (20.81 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Purine is an endogenous metabolite. Purine bases are the building blocks of the nucleic acids. Purine inhibits the activation of PARP. Purine protects against oxidant-induced cell injury. Purine can be used in the research of cancer and nervous system diseases[1][2][3][4].

IC_{50} & Target

Human Endogenous Metabolite

In Vitro

Purines, in particular adenosine, induce apoptosis or promote cell survival depending on the level of cellular interaction[1].

	Purines (100 μM-3 mM) protect against oxidant-induced cell injury by inhibiting the activation of the nuclear enzyme poly(ADP-ribose) polymerase (PARP) in RAW macrophages[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Purine diet (10% yeast power supplemented with adenine (50 ppm), diet, 3 weeks) induces renal injury and knee joint gouty lesions in rats[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Caution: Product has not been fully validated for medical applications. For research use only.

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