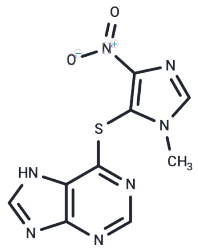
Data Sheet (Cat.No.T1237)

TargetMol

Azathioprine

Chemical Properties



CAS No. : 446-86-6

Formula: C9H7N7O2S

Molecular Weight: 277.26

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	Azathioprine (BW 57-322), an immunosuppressive agent, inhibits purine synthesis and GTP-binding protein Rac1 activation.
Targets(IC50)	Apoptosis,Rho,GPCR
In vitro	In murine and rat brain allografts, the combination of Azathioprine with Cyclosporin A or Prednisolone significantly enhances survival rates.
In vivo	Azathioprine inhibits Rac1 target genes in primary human CD4+ T lymphocytes, leading to apoptosis via the mitochondrial pathway. In isolated rat hepatocytes, Azathioprine depletes reduced glutathione (GSH), releases lactate dehydrogenase, and decreases cellular viability.

Solubility Information

Solubility	DMSO: 49 mg/mL (176.73 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 (7.21 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6067 mL	18.0336 mL	36.0672 mL
5 mM	0.7213 mL	3.6067 mL	7.2134 mL
10 mM	0.3607 mL	1.8034 mL	3.6067 mL
50 mM	0.0721 mL	0.3607 mL	0.7213 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

Tiede I, et al. J Clin Invest, 2003, 111(8), 1133-1145.
Fu Y H, Xu Z X, Jiang N, et al. High-throughput screening of active compounds against human respiratory syncytial virus. Virology. 2019
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Tapner MJ, et al. J Hepatol, 2004, 40(3), 454-463.
Menor C, et al. J Pharmacol Exp Ther, 2004, 311(2), 668-676.
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