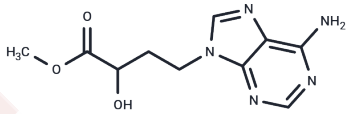
Data Sheet (Cat.No.T11134)

TargetMol

DZ2002

Chemical Properties



CAS No. : 33231-14-0

Formula: C10H13N5O3

Molecular Weight: 251.24

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	DZ2002, an orally active, reversible, and low-cytotoxic type III SAHH inhibitor (Ki=17.9 nM), exhibits significant immunosuppressive activity. It effectively prevents experimental dermal fibrosis by reversing the profibrotic phenotype in multiple cell types, making it useful for studying autoimmune diseases like lupus syndrome and systemic sclerosis.
Targets(IC50)	Others
In vitro	DZ2002 (0.1, 1, 10 μM; 96 h) inhibits the mixed lymphocyte reaction (MLR) response, IL-12 and TNF-α production from both mouse peritoneal exudate cells and human THP-1 cells (24 h), and expression of B7 (CD80/CD86) on differentiated THP-1 cells (64 h) [1].
In vivo	DZ2002 (2, 10, 50 mg/kg; i.p.; twice) blocks the DNFB-induced DTH response—a Th1 cell-mediated immune response with high IL-12 expression and significant macrophage involvement. DZ2002 (0.08, 2 mg/kg; i.p.; daily for 7 days) significantly suppresses delayed-type hypersensitivity and antibody secretion[1]. DZ2002 (50, 100 mg/kg; p.o.; daily for 4 weeks) exhibits a potent anti-fibrotic effect on dermal fibrosis by reducing collagen production, enhancing its degradation, and regulating various soluble factors in SSc mice model[2].

Solubility Information

Solubility	DMSO: 45 mg/mL (179.11 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9803 mL	19.9013 mL	39.8026 mL
5 mM	0.7961 mL	3.9803 mL	7.9605 mL
10 mM	0.398 mL	1.9901 mL	3.9803 mL
50 mM	0.0796 mL	0.398 mL	0.7961 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.

Reference

Wu QL, et al. Inhibition of S-adenosyl-L-homocysteine hydrolase induces immunosuppression. J Pharmacol Exp Ther. 2005 May;313(2):705-11.
Zhang Z, et al. DZ2002 ameliorates fibrosis, inflammation, and vasculopathy in experimental systemic sclerosis models. Arthritis Res Ther. 2019 Dec 16;21(1):290.
He SJ, et al. Therapeutic effects of DZ2002, a reversible SAHH inhibitor, on lupus-prone NZB×NZW F1 mice via interference with TLR-mediated APC response. Acta Pharmacol Sin. 2014 Feb;35(2):219-29.