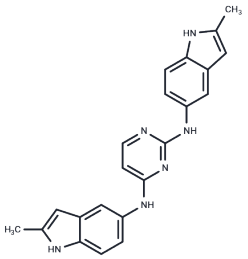
Data Sheet (Cat.No.T61448)

TargetMol

AZA1

Chemical Properties



CAS No. : 1071098-42-4

Formula: C22H20N6

Molecular Weight: 368.43

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	AZA1 (Rac1/Cdc42-IN-1) is a potent dual inhibitor of Rac1 and Cdc42. AZA1 induced apoptosis of prostate cancer cells and inhibited cell proliferation, migration and invasion.
Targets(IC50)	Apoptosis,Rho,CDK,Ras
In vitro	AZA1 (Rac1/Cdc42-IN-1) (2-10 μM; 72 hours) impedes the proliferation of human 22Rv1 prostate cancer cells, diminishes phosphorylation of PAK1, AKT, and BAD in EGF-stimulated 22Rv1 cells (2-10 μM; 24 hours), and obstructs Rac1 and Cdc42-dependent cell cycle progression (10 μM; 24 hours). AZA1 also inhibits Rac1 and Cdc42-dependent migration of 22Rv1, DU 145, and PC-3 prostate cancer cells, impacting cell motility and actin reorganization through PAK1/2 phosphorylation suppression.
In vivo	AZA1 (Rac1/Cdc42-IN-1) (100 μg; i.p.; daily for 2 weeks) effectively suppresses human 22Rv1 xenograft growth in 5-week-old athymic nu/nu (nude) mice and improves survival, with a significant impact on tumor growth suppression.[1]

Solubility Information

Solubility	DMSO: 60 mg/mL (162.85 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 (5.43 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	2.7142 mL	13.5711 mL	27.1422 mL
5 mM	0.5428 mL	2.7142 mL	5.4284 mL
10 mM	0.2714 mL	1.3571 mL	2.7142 mL
50 mM	0.0543 mL	0.2714 mL	0.5428 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

Zins K, et al. A Rac1/Cdc42 GTPase-specific small molecule inhibitor suppresses growth of primary human prostate cancer xenografts and prolongs survival in mice. PLoS One. 2013;8(9):74924.
Suzuki O, et al. Sialylation and glycosylation modulate cell adhesion and invasion to extracellular matrix in human malignant lymphoma: Dependency on integrin and the Rho GTPase family. Int J Oncol. 2015;47(6):2091-2099.
Pelin M, et al. Toxic equivalency factors (TEFs) after acute oral exposure of azaspiracid 1, -2 and -3 in mice. Toxicol Lett. 2018;282:136-146.