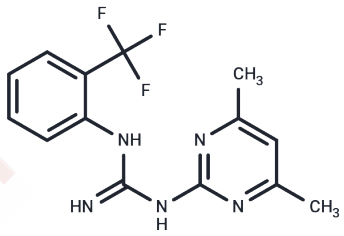
Data Sheet (Cat.No.T24833)

ZINC69391

Chemical Properties



CAS No. :	303094-67-9
Formula:	C14H14F3N5
Molecular Weight:	309.29
Storage:	Store at low temperature,Keep away from direct sunlight,Keep away from moisture 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	ZINC69391 (CysHHC10 acetate(1408311-03-4 free base)) is a selective inhibitor of Rac1 with antiproliferative and antimetastatic effects. ZINC69391 interferes with the interaction of Rac1 with Dock180, reduces Rac1-GTP levels and induces apoptosis.
Targets(IC50)	Apoptosis,Rho,Ras
In vitro	In U-87 MG and LN229 cells, ZINC69391 (0-125 μM) reduces cell proliferation of human glioma cells. ZINC69391 (50-100 μM) triggers cell cycle arrest[1]. ZINC69391 inhibits the growth of U937, HL-60, KG1A, and Jurkat cells (IC50s = 41-54 μM). In HL-60, U937, and KG1A cell lines, ZINC69391 (50 μM) triggers an increase in apoptotic cells. In LN229 cells, ZINC69391 (50 and 100 μM) augments the enzymatic activity of caspase 3 and increases the percentage of cells in the sub-G0/G1 phase in a concentration-dependent manner [3].
In vivo	In specific pathogen-free female BALB/c inbred mice (bearing F3II cells), ZINC69391 (25 mg/kg; i.p) impairs metastatic lung colonization and reduces by about 60% the formation of total metastatic lung colonies[2].

Solubility Information

Solubility	DMSO: 20 mg/mL (64.66 mM),Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2332 mL	16.1661 mL	32.3321 mL
5 mM	0.6466 mL	3.2332 mL	6.4664 mL
10 mM	0.3233 mL	1.6166 mL	3.2332 mL
50 mM	0.0647 mL	0.3233 mL	0.6466 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

Cardama GA, et al. Proapoptotic and antiinvasive activity of Rac1 small molecule inhibitors on malignant glioma cells. Onco Targets Ther. 2014;7:2021-2033. Published 2014 Oct 30.
Cardama GA, et al. Preclinical development of novel Rac1-GEF signaling inhibitors using a rational design approach in highly aggressive breast cancer cell lines. Anticancer Agents Med Chem. 2014;14(6):840-851.
Cabrera M, et al. Pharmacological Rac1 inhibitors with selective apoptotic activity in human acute leukemic cell lines. Oncotarget. 2017;8(58):98509-98523. Published 2017 Oct 4.