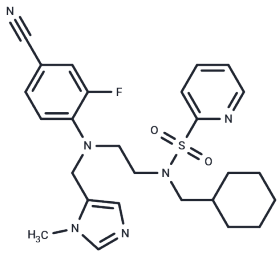
Data Sheet (Cat.No.T11282)

TargetMol

FGTI-2734

Chemical Properties



CAS No. : 1247018-19-4

Formula: C26H31FN6O2S

Molecular Weight: 510.63

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	FGTI-2734 is a dual farnesyl transferase (FT) and geranylgeranyl transferase-1 (GGT-1) inhibitor, exhibiting IC50 values of 250 nM and 520 nM for FT and GGT-1, respectively. It effectively prevents the membrane localization of KRAS, addressing the issue of KRAS resistance and inhibiting the growth of mutant KRAS patient-derived pancreatic tumors.
Targets(IC50)	Transferase,Ras,Kras
In vitro	FGTI-2734 (3-30 μM; 72 hours) inhibits both protein prenylation of HDJ2, RAP1A, KRAS and NRAS. FGTI-2734 inhibits KRAS membrane localization in RAS-transformed murine NIH3T3 cells and in mutant KRAS human cancer cells. FGTI-2734 (1-30 μM; 72 hours) induces CASPASE-3 and PARP cleavage in MiaPaCa2, L3.6pl and Calu6 cells.
In vivo	FGTI-2734 (intraperitoneally;100 mg/kg/daily for 18 to 25 days) only inhibits tumor growth in mutant KRAS-dependent tumors but not in mutant KRAS-independent tumors.

Solubility Information

Solubility	DMSO: 50 mg/mL (97.92 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 5 mg/mL (9.79 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	1.9584 mL	9.7918 mL	19.5837 mL
5 mM	0.3917 mL	1.9584 mL	3.9167 mL
10 mM	0.1958 mL	0.9792 mL	1.9584 mL
50 mM	0.0392 mL	0.1958 mL	0.3917 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

Kazi A, et al. Dual farnesyl and geranylgeranyl transferase inhibitor thwarts mutant KRAS-driven patient-derived pancreatic tumors. Clin Cancer Res. 2019 Jun 21.