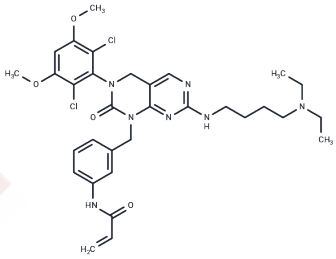
Data Sheet (Cat.No.T37426)

TargetMol

FIIN-1

Chemical Properties



CAS No. : 1256152-35-8

Formula: C32H39Cl2N7O4

Molecular Weight: 656.6

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	FIIN-1 (FGFR irreversible inhibitor-1) is an irreversible and selective FGFR inhibitor with Kd of 2.8, 6.9, 5.4, 120, 32 and 120 nM for FGFR1, FGFR2, FGFR3, FGFR4, Flt1, Flt14, respectively.FIIN-1 inhibited FGFR1, FGFR2, FGFR3, FGFR4, with IC50 of 9.2, 6.2, 11.9 and 189 nM. FIIN-1 inhibited FGFR1, FGFR2, FGFR3 and FGFR4, with IC50s of 9.2, 6.2, 11.9 and 189 nM, respectively.
Targets(IC50)	FGFR
In vitro	FIIN-1 (14 nM-46 μM; 72 h;) inhibits the proliferation of FGF signaling-sensitive cancer cell lines. The EC50s of 70 nM, 230 nM, 2.3 μM, for Bladder RT4, Pancreas A2.1, Bone RD-ES cells. EC50s of 0.22 and 4.6 μM for Ovary A2780 and PA-1 cells, respectively. EC50s of 0.08 and 4.5 μM for Lung SBC-3 and H520 cells, respectively. EC50s of 0.14 and 1.65 μM for Kidney G-401 and G-402 cells, respectively. EC50s of 0.014, 0.03, and 0.65 μM for Stomach KATO III, SNU-16, and FU97 cells, respectively.[1] FIIN-1 (20 nM) inhibits iFGFR1 autophosphorylation and its downstream Erk1/2 almost completely.[1] FIIN-1 binds to BLK, ERK5, KIT, MET, PDGFRB, and VEGFR2 with Kds of 65 nM, 160, 420, 1000, 480, and 210 nM, respectively. The IC50s for Blk and Flt1 are 381 nM and 661 nM respectively.[1]

Solubility Information

Solubility	DMSO: 45 mg/mL (68.53 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 (3.05 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	1.523 mL	7.615 mL	15.230 mL
5 mM	0.3046 mL	1.523 mL	3.046 mL
10 mM	0.1523 mL	0.7615 mL	1.523 mL
50 mM	0.0305 mL	0.1523 mL	0.3046 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

Zhou W, et al. A structure-guided approach to creating covalent FGFR inhibitors. Chem Biol. 2010 Mar 26;17(3): 285-95.