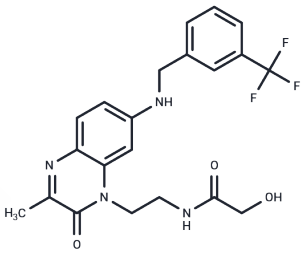
Data Sheet (Cat.No.T6412)

TargetMol

CVT-12012

Chemical Properties



CAS No. : 1018675-35-8

Formula: C21H21F3N4O3

Molecular Weight: 434.41

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	CVT-12012 is an orally bioavailable inhibitor of stearoyl-CoA desaturase (SCD; IC50 = 6.1 nM in HepG2 cells).
Targets(IC50)	Stearoyl-CoA Desaturase (SCD)
In vivo	CVT-12012 is highly potent in a human cell-based (HEPG2) SCD assay (IC(50)=6nM). This compound has 78% oral bioavailability in rats and is preferentially distributed into liver (76 times vs plasma) with relatively low brain penetration[1].

Solubility Information

Solubility	DMSO: 125 mg/mL (287.75 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: 4 mg/mL (9.21 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	2.302 mL	11.5099 mL	23.0197 mL
5 mM	0.4604 mL	2.302 mL	4.6039 mL
10 mM	0.2302 mL	1.151 mL	2.302 mL
50 mM	0.046 mL	0.2302 mL	0.4604 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

Koltun D O , Vasilevich N I , Parkhill E Q , et al. Orally bioavailable, liver-selective stearoyl-CoA desaturase (SCD) inhibitors[J]. Bioorganic and Medicinal Chemistry Letters, 2009, 19(11):3050-3053.
Atkinson KA, Beretta EE, Brown JA,et al.N-benzylimidazole carboxamides as potent, orally active stearoylCoA desaturase-1 inhibitors[J].Bioorg Med Chem Lett. 2011 Mar 15;21(6):1621-5.