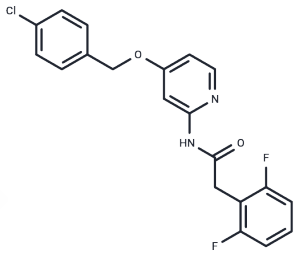
Data Sheet (Cat.No.T10877)

TargetMol

CPDA

Chemical Properties



CAS No. : 1415834-63-7

Formula: C20H15ClF2N2O2

Molecular Weight: 388.8

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	CPDA is a new potent inhibitor of SH2 domain-containing inositol phosphatase 2 (SHIP2).
Targets(IC50)	Phosphatase
In vitro	CPDA enhances insulin signaling. CPDA was found to enhance in vitro insulin signaling through the Akt pathway more efficiently than the previously reported SHIP2 inhibitor AS1949490, and ameliorated abnormal glucose metabolism in diabetic (db/db) mice.
In vivo	CPDA significantly enhances abnormal glucose metabolism in diabetic animals, as evidenced by its effectiveness in improving glucose metabolism in db/db mice.

Solubility Information

Solubility	DMSO: 50 mg/mL (128.6 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 (5.14 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	2.572 mL	12.8601 mL	25.7202 mL
5 mM	0.5144 mL	2.572 mL	5.144 mL
10 mM	0.2572 mL	1.286 mL	2.572 mL
50 mM	0.0514 mL	0.2572 mL	0.5144 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

Rational design and synthesis of 4-substituted 2-pyridin-2-ylamides with inhibitory effects on SH2 domain-containing inositol 5'-phosphatase 2 (SHIP2). Eur J Med Chem. 2013 Apr;62:649-660.