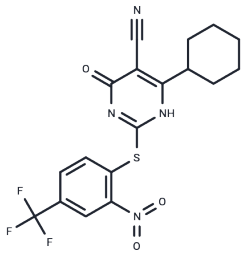
Data Sheet (Cat.No.T13867)

RH01386

Chemical Properties



CAS No. : 301177-36-6

Formula: C18H15F3N4O3S

Molecular Weight: 424.4

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	RH01386 is a small molecule that prevents ER stress-induced β cell dysfunction and death, inhibits proapoptotic gene expression, and restores ER stress-impaired glucose-stimulated insulin secretion responses, showing potential for type 2 diabetes treatment.
Targets(IC50)	Apoptosis,Others
In vitro	ATP levels in βTC6 cells treated with (tunicamycin) Tm increase by RH01386.RH01386 exhibits a EC50 value of 1.894 μM. RH01386 dose-dependently inhibits (tunicamycin) Tm-induced cell death, and inhibits the activity of caspase-3, a downstream effector of the apoptotic pathway in βTC6 cells.

Solubility Information

Solubility	DMSO: 55 mg/mL (129.59 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 (4.71 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	2.3563 mL	11.7813 mL	23.5627 mL
5 mM	0.4713 mL	2.3563 mL	4.7125 mL
10 mM	0.2356 mL	1.1781 mL	2.3563 mL
50 mM	0.0471 mL	0.2356 mL	0.4713 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

Tran K, et al. Identification of small molecules that protect pancreatic β cells against endoplasmic reticulum stress-induced cell death.ACS Chem Biol. 2014 Dec 19;9(12):2796-806.