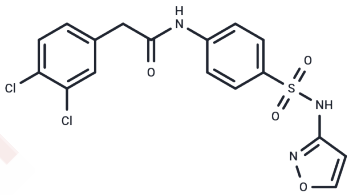
Data Sheet (Cat.No.T64320)

TargetMol

ML251

Chemical Properties



CAS No. : 1486482-16-9

Formula: C17H13Cl2N3O4S

Molecular Weight: 426.27

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	ML251 is a potent novel nanomolar inhibitor of T. brucei and T. cruzi phosphofructokinase[1]. ML251 inhibits T. brucei PFK (IC50=0.37 μM) and T. cruzi PFK (IC50=0.13 μM). ML251 can be used for the research of parasite[1].
Targets(IC50)	Glucokinase,Parasite
In vitro	ML251 produces modest dose-dependent toxicity[1].
Cell Research	The cell cytotoxicity assay of ML251 (0~33.3 μg/mL) in T. brucei cell shows dose-dependent reduction of cell viability[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (117.3 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (5.86 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	2.3459 mL	11.7297 mL	23.4593 mL
5 mM	0.4692 mL	2.3459 mL	4.6919 mL
10 mM	0.2346 mL	1.173 mL	2.3459 mL
50 mM	0.0469 mL	0.2346 mL	0.4692 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

Brimacombe KR, et al. Identification of ML251, a Potent Inhibitor of T. brucei and T. cruzi Phosphofructokinase. ACS Med Chem Lett. 2013;5(1):12-17.