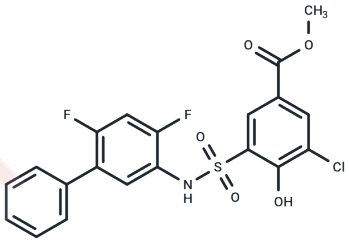
Data Sheet (Cat.No.T7424)

TargetMol

NDI-091143

Chemical Properties



CAS No. : 2375840-87-0

Formula: C20H14ClF2NO5S

Molecular Weight: 453.84

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	NDI-091143 is a potent, high-affinity human ATP-citrate lyase (ACLY) inhibitor with an IC50 of 2.1 nM (ADP-Glo assay), indirectly disrupting citrate binding via an unexpected mechanism of inhibition.
Targets(IC50)	ATP Citrate Lyase

Solubility Information

Solubility	DMSO: 125 mg/mL (275.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (22.03 mM),Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (7.27 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	2.2034 mL	11.0171 mL	22.0342 mL
5 mM	0.4407 mL	2.2034 mL	4.4068 mL
10 mM	0.2203 mL	1.1017 mL	2.2034 mL
50 mM	0.0441 mL	0.2203 mL	0.4407 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

Jia, Wei, Silvana, et al. An allosteric mechanism for potent inhibition of human ATP-citrate lyase[J]. Nature, 2019.
Granchi C.Discovery of Allosteric Inhibition of Human ATP-Citrate Lyase[J].Trends Pharmacol Sci. 2019 Jun;40(6): 364-366.