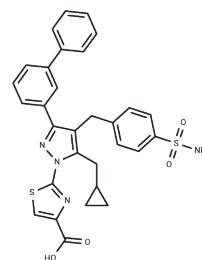


LDH-IN-1

Chemical Properties

CAS No. :	1964515-43-2
Formula:	C30H26N4O4S2
Molecular Weight:	570.68
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	LDH-IN-1 is a pyrazole-based human lactate dehydrogenase (LDH) inhibitor (IC50s of 32 and 27 nM for LDHA and LDHB, respectively).
Targets (IC50)	Dehydrogenase
In vitro	LDH-IN-1 exhibit low nM inhibition of both LDHA and LDHB, submicromolar inhibition of lactate production, and inhibition of glycolysis in MiaPaCa2 pancreatic cancer and A673 sarcoma cells.
In vivo	LDH-IN-1 exhibits clearance rates significantly surpassing those of hepatic blood flow in mice (90 mL/min/kg), demonstrating an in vivo clearance of 227 mL/min/kg[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (87.61 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 (3.5 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7523 mL	8.7615 mL	17.523 mL
5 mM	0.3505 mL	1.7523 mL	3.5046 mL
10 mM	0.1752 mL	0.8761 mL	1.7523 mL
50 mM	0.035 mL	0.1752 mL	0.3505 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

Rai G, et al. Discovery and Optimization of Potent, Cell-Active Pyrazole-Based Inhibitors of Lactate Dehydrogenase (LDH). J Med Chem. 2017 Nov 22;60(22):9184-9204.

He J, Dong C, Zhang H, et al. The oncogenic role of TFAP2A in bladder urothelial carcinoma via a novel long noncoding RNA TPRG1-AS1/DNMT3A/CRTAC1 axis. Cellular Signalling. 2023, 102: 110527.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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