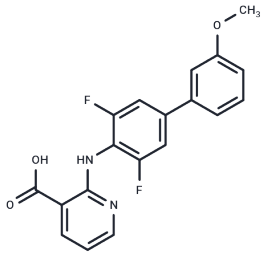
Data Sheet (Cat.No.T10384)

TargetMol

Farudodstat

Chemical Properties



CAS No. : 1035688-66-4

Formula: C19H14F2N2O3

Molecular Weight: 356.32

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	Farudodstat (ASLAN003) is an orally active and potent inhibitor of DHODH (Human Dihydroorotate Dehydrogenase) with antitumor activity, showing potential as a first-in-class candidate in AML [Acute Myeloid Leukemia].
Targets(IC50)	Apoptosis,Dehydrogenase,DNA/RNA Synthesis
In vitro	ASLAN003 is a highly potent dihydroorotate dehydrogenase inhibitor that induces differentiation, as well as reduces cell proliferation and viability, of acute myeloid leukemia cell lines and primary acute myeloid leukemia blasts including in chemo-resistant cells. Apoptotic pathways are triggered by ASLAN003, and it also significantly inhibits protein synthesis and activates AP-1 transcription, contributing to its differentiation promoting capacity[2].
In vivo	ASLAN003 substantially reduces leukemic burden and prolongs survival in acute myeloid leukemia xenograft mice and acute myeloid leukemia patient-derived xenograft models. Notably, the drug has no evident effect on normal hematopoietic cells and exhibits excellent safety profiles in mice, even after a prolonged period of administration. ASLAN003 is an agent targeting dihydroorotate dehydrogenase with potential in the treatment of acute myeloid leukemia. ASLAN003 is currently being evaluated in phase 2a clinical trial in acute myeloid leukemia patients[2].

Solubility Information

Solubility	DMSO: 250 mg/mL (701.62 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: 4 mg/mL (11.23 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	2.8065 mL	14.0323 mL	28.0647 mL
5 mM	0.5613 mL	2.8065 mL	5.6129 mL
10 mM	0.2806 mL	1.4032 mL	2.8065 mL
50 mM	0.0561 mL	0.2806 mL	0.5613 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

Marco L. Lolli, et al. Human Dihydroorotate Dehydrogenase (hDHODH) as a new target on Acute Myelogenous Leukemia (AML): Targeting Myeloid Differentiation using Potent and Innovative hDHODH Inhibitors. 23rd Swedish Conference on Macromolecular Structure and Function Tällberg, 14-17 June 2019

Jianbiao Zhou, et al. ASLAN003, a potent dihydroorotate dehydrogenase inhibitor for differentiation of acute myeloid leukemia. Haematologica. 2019 Nov7;haematol.2019.230482.