SIRT5 inhibitor 1

Cat. No.: HY-112634

CAS No.: 2166487-21-2

Molecular Formula: $C_{31}H_{39}FN_6O_6S_2$

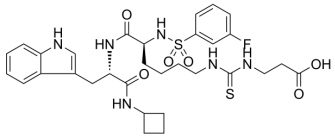
Molecular Weight: 675

Target: Sirtuin

Pathway: Cell Cycle/DNA Damage; Epigenetics

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (185.19 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.4815 mL	7.4074 mL	14.8148 mL
	5 mM	0.2963 mL	1.4815 mL	2.9630 mL
	10 mM	0.1481 mL	0.7407 mL	1.4815 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (3.08 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (3.08 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.08 mg/mL (3.08 mM); Clear solution; Need warming

BIOLOGICAL ACTIVITY

Description

SIRT5 inhibitor 1 is a potent Human Sirtuin 5 deacylase inhibitor, with an IC_{50} of 0.11 μM.

IC_{50} & Target

IC50: 0.11 μM (Sirtuin)[1].

In Vitro

SIRT5 inhibitor 1 (compound 49) is a very potent human sirtuin 5 deacylase inhibitor, with an IC_{50} of 0.11 μM, >100-fold from compound 1[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Commun. 2022 Oct 17;13(1):6121.
- J Cell Mol Med. 2020 Dec;24(23):14039-14049.
- bioRxiv. January 05, 2022.
- bioRxiv. August 09, 2021.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Rajabi N, et al. Mechanism-Based Inhibitors of the Human Sirtuin 5 Deacylase: Structure-Activity Relationship, Biostructural, and Kinetic Insight. Angew Chem Int Ed Engl. 2017 Nov 20;56(47):14836-14841.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA