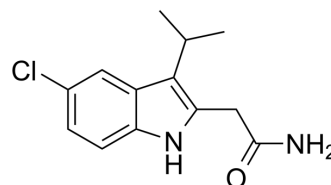


SIRT1-IN-2

Cat. No.:	HY-146689
CAS No.:	2470969-89-0
Molecular Formula:	C ₁₃ H ₁₅ ClN ₂ O
Molecular Weight:	250.72
Target:	Sirtuin
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (398.85 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.9885 mL	19.9426 mL	39.8851 mL
5 mM	0.7977 mL	3.9885 mL	7.9770 mL
10 mM	0.3989 mL	1.9943 mL	3.9885 mL

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

BIOLOGICAL ACTIVITY

Description

SIRT1-IN-2 (compound 3h) is a potent and selective SIRT1 (silent information regulator 1) inhibitor, with an IC₅₀ of 1.6 μM^[1].

IC₅₀ & Target

SIRT1 1.6 μM (IC ₅₀)	SIRT2 39 μM (IC ₅₀)
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In Vitro

SIRT1-IN-2 (compound 3h) (0-100 μM, 48 h) inhibits the proliferation of Human cancer cell lines including K562, HCT-116, HepG2, A549, and MCF-7, and shows significantly less cytotoxic on 293T cells and HUVEC^[1].

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

Cell Cytotoxicity Assay^[1]

Cell Line:	Human cancer cell lines (K562, HCT-116, H460, HepG2, A549, HT-29, MCF-7) and normal cell lines (293T, HUVEC). ^[1]
Concentration:	0, 0.01, 0.1, 1, 10, 100 μM
Incubation Time:	48 h

Result:

Inhibited the proliferation of Human cancer cell lines including K562, HCT-116, HepG2, A549, and MCF-7, with IC₅₀ values of 51, 37, 40, 48, and 48 μM, respectively. And showed significantly less cytotoxic on 293T cells and HUVEC, with IC₅₀ values of > 100 and 45 μM, respectively.

REFERENCES

[1]. Laaroussi H, Ding Y, Teng Y, et al. Synthesis of indole inhibitors of silent information regulator 1 (SIRT1), and their evaluation as cytotoxic agents. Eur J Med Chem. 2020;202:112561.

Caution: Product has not been fully validated for medical applications. For research use only.

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