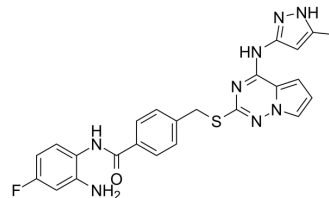


## Snail/HDAC-IN-1

Cat. No.:	HY-144315
CAS No.:	2415281-52-4
Molecular Formula:	C <sub>24</sub> H <sub>21</sub> FN <sub>8</sub> OS
Molecular Weight:	488.54
Target:	HDAC
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (255.86 mM); ultrasonic and warming and heat to 60°C

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		2.0469 mL	10.2346 mL	20.4692 mL
	5 mM		0.4094 mL	2.0469 mL	4.0938 mL
	10 mM		0.2047 mL	1.0235 mL	2.0469 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Snail/HDAC-IN-1 is a potent Snail/HDAC dual target inhibitor. Snail/HDAC-IN-1 displays potent inhibitory activity against HDAC1 with an IC<sub>50</sub> of 0.405 μM and potent inhibition against Snail with a K<sub>d</sub> of 0.18 μM. Snail/HDAC-IN-1 increases histone H4 acetylation in HCT-116 cells and decreases the expression of Snail protein to induce cell apoptosis<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

HDAC1 0.405 μM (IC <sub>50</sub> )	Snail 0.18 μM (K <sub>d</sub> )
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#### In Vitro

Snail/HDAC-IN-1 (compound 9n) shows antiproliferative activity in HCT-116 cell lines with an IC<sub>50</sub> of 0.0751 μM. Snail/HDAC-IN-1 shows a good inhibitory effect on NCI-H522 (GI<sub>50</sub>=0.0488 μM), MDA-MB-435 (GI<sub>50</sub>=0.0361 μM), and MCF7 (GI<sub>50</sub>=0.0518 μM)<sup>[1]</sup>.

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

### REFERENCES

[1]. Cui H, et al. Design and synthesis of dual inhibitors targeting snail and histone deacetylase for the treatment of solid tumour cancer. Eur J Med Chem. 2022;229:114082.

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

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