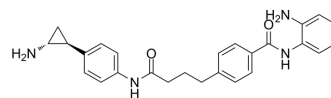


## Corin

Cat. No.:	HY-111048
CAS No.:	1808113-09-8
Molecular Formula:	C <sub>26</sub> H <sub>28</sub> N <sub>4</sub> O <sub>2</sub>
Molecular Weight:	428.53
Target:	Histone Demethylase; HDAC
Pathway:	Epigenetics; Cell Cycle/DNA Damage
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (233.36 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.3336 mL	11.6678 mL	23.3356 mL
		5 mM	0.4667 mL	2.3336 mL	4.6671 mL
	10 mM	0.2334 mL	1.1668 mL	2.3336 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: ≥ 2.5 mg/mL (5.83 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.83 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	Corin is a dual inhibitor of histone lysine specific demethylase (LSD1) and histone deacetylase (HDAC), with a K <sub>i</sub> (inact) of 110 nM for LSD1 and an IC <sub>50</sub> of 147 nM for HDAC1.
IC <sub>50</sub> & Target	IC <sub>50</sub> : 147 nM (HDAC1), K <sub>i</sub> (inact): 110 nM (LSD1) <sup>[1]</sup> .
In Vitro	<p>Corin is able to inhibit the deacetylation of semisynthetic, reconstituted nucleosomes by the CoREST ternary complex. Corin shows irreversible inhibition of HDAC1 activity. In Comparison to MS-275, corin appears to more potently (Corin EC<sub>50</sub> 95 nM vs. MS-275 EC<sub>50</sub> 420 nM) and efficaciously induce cellular H3K9 acetylation. Interestingly, Corin (1 μM) is non-toxic to primary human melanocytes in contrast to MS-275 (1 μM)<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

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## CUSTOMER VALIDATION

- Nat Struct Mol Biol. 2022 Nov 7.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Kalin JH, et al. Targeting the CoREST complex with dual histone deacetylase and demethylase inhibitors. Nat Commun. 2018 Jan 4;9(1):53.

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

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