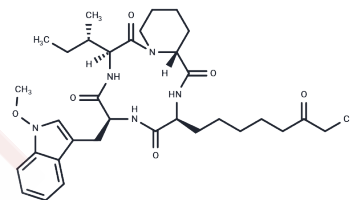


## Apicidin

## Chemical Properties

CAS No. :	183506-66-3
Formula:	C34H49N5O6
Molecular Weight:	623.78
Storage:	Store at low temperature Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	Apicidin (OSI 2040) is a histone deacetylase (HDAC) inhibitor with antiparasitic and antiproliferative activity. It attenuates memory deficits, inhibits cell growth and proliferation, and induces apoptosis and autophagy by decreasing Abeta load in APP/PS1 mice, making it a valuable tool for leukemia research.
Targets(IC50)	Apoptosis,HDAC,Parasite,Autophagy
In vitro	Apicidin (0.1-10 $\mu$ M, 24 h) inhibits the viability of AT-84 cells in a dose-dependent manner, with concentrations $\geq 1$ $\mu$ M leading to a significant decrease in viability[1].
In vivo	In the mouse tumor model, at the end of 14 days, Apicidin (5 mg/kg, intraperitoneal injection, once daily) significantly inhibited tumor growth by up to 46% compared to the control group[1].

## Solubility Information

Solubility	DMSO: 10 mg/mL (16.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.6031 mL	8.0156 mL	16.0313 mL
5 mM	0.3206 mL	1.6031 mL	3.2063 mL
10 mM	0.1603 mL	0.8016 mL	1.6031 mL
50 mM	0.0321 mL	0.1603 mL	0.3206 mL

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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

Ahn MY, et al. HDAC inhibitor apicidin suppresses murine oral squamous cell carcinoma cell growth in vitro and in vivo via inhibiting HDAC8 expression. *Oncol Lett.* 2018 Nov;16(5):6552-6560.

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