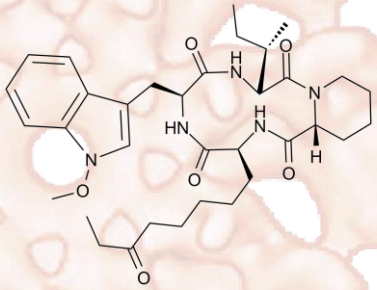
Product Data Sheet

Apicidin



Cat. No.:	A8176
CAS No.:	183506-66-3
Formula:	C34H49N5O6
M.Wt:	623.78
Synonyms:	
Target:	DNA Damage/DNA Repair
Pathway:	HDAC
Storage:	Store at -20°C

Solvent & Solubility

Limited solubility, soluble in DMSO or ethanol

In Vitro — Preparing Stock Solutions

Concentration \ Mass (Solvent)	1mg	5mg	10mg
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

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

Biological Activity

Shortsummary	Potent HDAC inhibitor
IC_{50} & Target	15.8 nM (HDAC3), 665.1 nM (HDAC6)

In Vitro

Cell Viability Assay

Cell Line:	HeLa cells
Preparation method:	The solubility of this compound in DMSO is limited. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.
Reacting conditions:	1 μg/mL; 24 hrs
Applications:	Apicidin exhibited long-lasting anti-proliferative activity against HeLa cells, up

		to 48 hrs after withdrawal.
In Vivo	**Animal experiment**	
	Animal models:	Ishikawa endometrial cancer xenografted mouse model
	Dosage form:	5 mg/kg; i.p.; q.d., for 21 days
	Applications:	Significant inhibition of tumor growth was observed starting from day 15 after the Apicidin treatment. Apicidin (5 mg/kg) significantly inhibited tumor growth up to 53%.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Ballante F, Reddy DR, et al. "Structural insights of SmKDAC8inhibitors: Targeting Schistosoma epigenetics through a combined structure-based3D QSAR, in vitro and synthesis strategy." Bioorg Med Chem. 2017 Apr1;25(7):2105-2132.PMID:28259528
2.Bagnall NH, Hines BM, et al."Insecticidal activities of histone deacetylase inhibitors against a dipteranparasite of sheep, Lucilia cuprina." Int J Parasitol Drugs Drug Resist. 2017Apr;7(1):51-60.PMID:28110187

See more customer validations on www.apexbt.com.

References

[1]. Han JW, Ahn SH, Park SH, Wang SY, Bae GU, Seo DW, et al. Apicidin, a histone deacetylase inhibitor, inhibits proliferation of tumor cells via induction of p21WAF1/Cip1 and gelsolin. Cancer Res 2000,60:6068-6074.
[2]. Ahn MY, Chung HY, Choi WS, Lee BM, Yoon S, Kim HS. Anti-tumor effect of apicidin on Ishikawa human endometrial cancer cells both in vitro and in vivo by blocking histone deacetylase 3 and 4. Int J Oncol 2010,36:125-131.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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