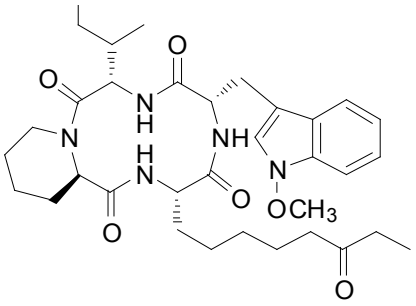
Apicidin

Catalog Number P011-1MG

Catalog Number P011-5MG



FEATURES

- Potent HDAC inhibitor
- Blocks cell cycle progression at G1
- Induces activation of HIV-1 promoter

INTRODUCTION

Potent inhibitor of histone deacetylase (HDAC) activity and proliferation. Induces cell cycle arrest at the G1 phase. At 100nM it induces a long lasting hyperacetylation of histone H4 while that induced by trichostatin is transient. Stimulates apoptosis. Apoptosis is induced via induction of Fas/Fas ligand. Displays potent antiangiogenic effects and dramatically decreases HIF-1α protein levels and transcriptional activity in human and mouse tumor cell lines. Apicidin is a fungal toxin that has broad spectrum activity against Apicomplexan parasites

FORM:	White solid
MOLECULAR WEIGHT:	623.78
STORAGE:	-20°C
FORMULA:	$C_{34}H_{49}N_5O_6$
CAS NUMBER:	183506-66-3
OTHER NAMES:	Cyclo[(2S)-2-amino-8-oxodecanoyl-1-methoxy-L-tryptophyl-L-isoleucyl-(2R)-2-piperidinexcarbonyl]
USES:	Soluble in ethanol and DMSO to 10 mg/mL

REFERENCES:

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Mazitschek, R., Patel, V., Wirth, DF., et al. Development of a fluorescence polarization based assay for histone deacetylase ligand discovery. Bioorg. Med. Chem. Lett. 18, 2809-2812 (2008).

Abbas, HK., Gronwald, JW., Plaisance, KL., et al. Histone deacetylase activity and phytotoxic effects following exposure of duckweed (Lemna pausicostata L.) to apicidin and HC-toxin. Phytopathology 91:12, 1141-1148 (2001).