Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

M344

Catalog No: tcsc1342

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
251456-60-7

Formula:
$C_{16}H_{25}N_3O_3$

Pathway:
Epigenetics;Cell Cycle/DNA Damage

Target:
HDAC;HDAC

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (325.32 mM)

Alternative Names:
D 237;MS 344

Observed Molecular Weight:
307.39

Product Description

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M344 (D 237) is an inhibitor of **histone deacetylase** (**IC_{50}**=100 nM) and an inducer of terminal cell fifferentiation.

IC50 & Target: IC50: 100 nM (Histone Deacetylase)[1]

In Vitro: M344 is a potential histone deacetylase (HDAC) inhibitor. BRCA1 mRNA levels are determined by RT-PCR following exposure to increasing concentrations of the HDAC inhibitor M344 alone and in combination with Cisplatin in all 6 cell lines evaluated in this study. With increasing concentrations of M344, there is a dose dependant decrease in BRCA1 mRNA and treatment with both 1 and 5 μM concentrations of M344 resulting in a significant decrease in BRCA1 expression in all cell lines examined. M344 in combination with Cisplatin leads to a decrease in BRCA1 mRNA expression as compared to Cisplatin treatment alone in all cell lines with the exception of A2780s, which is recognized as having potent cytotoxicity to Cisplatin. In the MCF7 cell line, BRCA1 is down regulated at physiological doses of M344 (0.5 μM and 1 μM) but M344 does not have the same inhibitory effect on BRCA1 at the 5.0 μM dose. Co-treatment with Cisplatin and increasing concentrations of M344 reduces BRCA1 protein levels in all breast and ovarian cell lines examined[2].