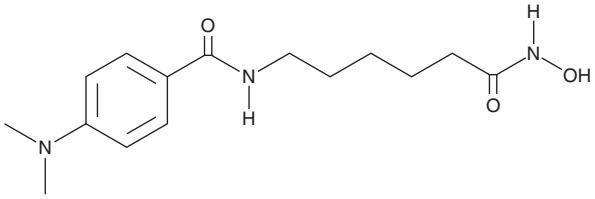
PRODUCT INFORMATION

CAY10398

Item No. 89740

CAS Registry No.:	193551-00-7
Formal Name:	4-(dimethylamino)-N-[6-(hydroxyamino)-6-oxohexyl]-benzamide
Synonyms:	MD 85, PX 089274
MF:	$C_{15}H_{23}N_3O_3$
FW:	293.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 301 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CAY10398 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10398 in the solvent of choice, which should be purged with an inert gas. CAY10398 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10398 in these solvents is approximately 1, 14, and 20 mg/ml, respectively.

CAY10398 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10398 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10398 has a solubility of approximately 300 µg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10398 is an inhibitor of histone deacetylase (HDAC1) with an IC_{50} value of 10 µM.[1] Similar potency is observed with trapoxin A and B, whereas trichostatin A is more potent inhibitor of the enzyme. Trichostatin A also selectively inhibits the removal of acetyl groups from the amino-terminal lysine residues of core histones, which modulates the access of transcription factors to the underlying genomic DNA.[2] However, trichostatin A is much more expensive than CAY10398. CAY10398 thus represents a selective and cost-effective compound for the inhibition of HDAC.

References

1. Jung, M., Hoffmann, K., Brosch, G., *et al.* Analogues of Trichostatin A and Trapoxin B as histone deacetylase inhibitors. *Bioorg. Medicinal Chem. Letters* **7(13)**, 1655-1658 (1997).
2. Taunton, J., Hassig, C.A., and Schreiber, S.L. A mammalian histone deacetylase related to the yeast transcriptional regulator Rpd3p. *Science* **272(5260)**, 408-411 (1996).

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