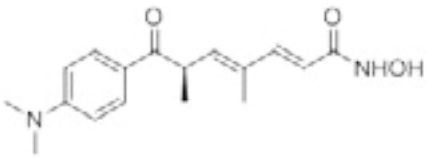
# Trichostatin A

Catalog Number P010-1MG

ARBOR ASSAYS

## FEATURES

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




## INTRODUCTION

Trichostatin A is a potent, reversible inhibitor of histone deacetylase (HDAC) with a Ki of 3.4 nM. In human Jurkat T cells, trichostatin A arrests cell cycle progression in G1 and inhibits the activity of the HDAC1 with an $IC_{50}$ value of 70 nM. Trichostatin A 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. Induces accelerated dedifferentiation of primordial germ cells into embryonic germ cells. Potent anti-cancer agent.

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| **FORM:** | Tan powder |
| **MOLECULAR WEIGHT:** | 302.37 |
| **STORAGE:** | -20°C |
| **FORMULA:** | $C_{17}H_{22}N_2O_3$ |
| **CAS NUMBER:** | 58880-19-6 |
| **OTHER NAMES:** | (2E,4*E*,6*R*)-7-(4-(Dimethylamino)phenyl)-*N*-hydroxy-4,6-dimethyl-7-oxo-2,4-heptadienamide, TSA |
| **USES:** | Soluble to 3 mg/mL in ethanol and 15 mg/mL in DMSO |

## REFERENCES:

Taunton, J., Hassig, CA., and Schreiber, SL. A mammalian histone deacetylase related to the yeast transcriptional regulator Rpd3p. Science, 272, 408-411 (1996).

Hoshikawa, Y., Kwon, HJ., Yoshida, M., et al. Trichostatin A induces morphological changes and gelsolin expression by inhibiting histone deacetylase in human carcinoma cell lines. Exp. Cell Res. 214, 189-197 (1994).

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