

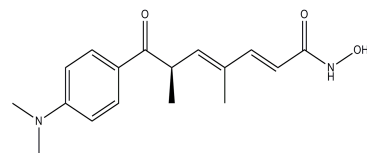
Trichostatin A (TSA)

CATALOG #: 1606-1

AMOUNT: 1 mg

LOT #:

STRUCTURE:



MOLECULAR FORMULA: C₁₇H₂₂N₂O₃

MOLECULAR WEIGHT: 302.4

CAS NUMBER: 58880-19-6

SOURCE: Isolated from *Streptomyces hygroscopicus*

PURITY: ≥99%

APPEARANCE: Whitish film adhered to inside of vial

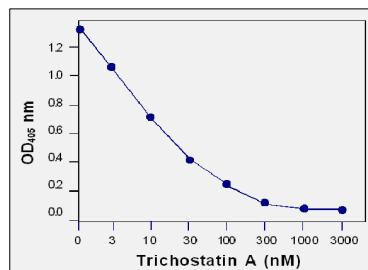
SOLUBILITY: Soluble in DMSO or ethanol

STORAGE CONDITIONS:

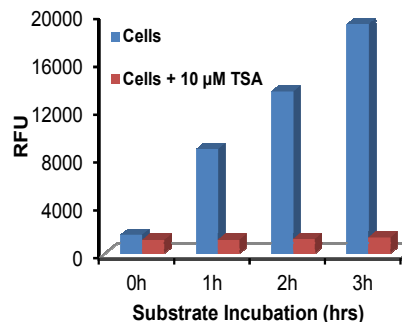
Store at -20°C (before reconstitution). Following reconstitution at DMSO, aliquot and freeze at -20°C (stable for 6 months). Following reconstitution at ethanol, store at 4°C (stable for 2-3 months).

DESCRIPTION:

Potent, reversible inhibitor of histone deacetylase. Mediates the activation of O⁶-methylguanine-DNA methyltransferase (MGMT). May be involved in cell cycle progression of several cell types, induces cell growth arrest at both G1 and G2/M phases. In some cases induces apoptosis.



Trichostatin A Inhibits HDAC Activity in HeLa nuclear extract. HeLa nuclear extract (NE) was incubated with 5 µl HDAC colorimetric substrate in the presence of various concentrations of HDAC inhibitor, Trichostatin A. After 30 min, reactions were stopped with 10 µl Lysine Developer. Samples were then read in a microtiter plate reader with O.D. = 405 nm.



Trichostatin A inhibits HDAC Activity in HeLa Cells. *InSitu* HDAC activity was assayed by using BioVision *InSitu* HDAC Activity Fluorometric Assay Kit (Cat # K339-100). Briefly, 10⁴ HeLa cells were seeded per well of a clear tissue culture 96-well plate and allowed to grow to log phase. Cells were incubated with HDAC substrate or HDAC substrate along with Trichostatin A inhibitor (TSA, 10 µM) in growth medium for zero, one, two or three hours following which the cells were lysed. Developer was added to the wells and incubated for thirty minutes at 37°C. Fluorescence was measured at 368/442 nm.

RELATED PRODUCTS:

Apoptosis Detection Kits & Reagents

Annexin V Kits & Bulk Reagents	Caspase Assay Kits & Reagents
Mitochondrial Apoptosis Kits & Reagents	Nuclear Apoptosis Kits & Reagents
Apoptosis Inducers and Set	Apoptotic Cell Isolation Kit

Cell Fractionation System

Mitochondria/Cytosol Fractionation Kit	Nuclear/Cytosol Fractionation Kit
Membrane Protein Extraction Kit	Cytosol/Particulate Rapid Separation Kit
Mammalian Cell Extraction Kit	FractionPREP Fractionation System

Cell Proliferation & Senescence

Quick Cell Proliferation Assay Kit	Senescence Detection Kit
LDH-Cytotoxicity Assay Kit	Bioluminescence Cytotoxicity Assay Kit
Live/Dead Cell Staining Kit	
High Throughput Apoptosis/Cell Viability Assay Kits	

Cell Damage & Repair

HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
HAT Colorimetric Assay Kit & Reagents
DNA Damage Quantification Kit
Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

cAMP & cGMP Assay Kits	Akt & JNK Activity Assay Kits
Beta-Secretase Activity Assay Kit	

Adipocyte & Lipid Transfer

Recombinant Adiponectin, Survivin, & Leptin	PLTP Activity Assay Kit
CETP Activity Assay & Drug Discovery Kits	Total Cholesterol Quantification Kit

Molecular Biology & Reporter Assays

siRNA Vectors	Cloning Insert Quick Screening Kit
Mitochondrial & Genomic DNA Isolation Kits	5 Minutes DNA Ligation Kit
20 Minutes Gel Staining/Destaining Kit	Growth Factors and Cytokines
β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit	
Quality Antibodies for Apoptosis and Signal Transduction Molecules	