

A DRUG SCREENING EXPERT

In vivo	Trichostatin A and Quercetin alone had no effect. However, the combination of low-dose Trichostatin A and Quercetin significantly inhibited tumor growth. [3]
Kinase Assay	In vitro HDAC activity: Total cellular extracts are prepared from each breast cancer cell line (MCF-7, T-47D, ZR-75-1, BT-474, MDA-MB-231, MDA-MB-453, CAL 51, or SK-BR-3). A 20 μ L crude cell extract ($\sim 2.5 \times 10^5$ cells), in the presence of varying concentrations of Trichostatin A in 0.1% (v/v) ethanol or 0.1% (v/v) ethanol as vehicle control, are incubated for 60 minutes at 25 $^{\circ}$ C with 1 μ L ($\sim 1.5 \times 10^6$ cpm) of [3H]acetyl-labeled histone H4 peptide substrate (NH ₂ -terminal residues 2-20) that has been acetylated with [3H]acetic acid, sodium salt (3.7 GBq/mmol) by an in vitro incorporation method. Each 200 μ L reaction is quenched with 50 μ L of 1 M HCl/0.16 M acetic acid and extracted with 600 μ L of ethyl acetate, and released [3H]acetate is quantified by scintillation counting. IC ₅₀ values are determined graphically using nonlinear regression to fit inhibition data to the appropriate dose-response curve.
Cell Research	Cells are exposed to various concentrations of Trichostatin A for 96 hours. After treatment, cell proliferation is estimated using the sulforhodamine B colorimetric assay. Cell viability is determined by trypan blue exclusion. (Only for Reference)

Solubility Information

Solubility	DMSO: 50 mg/mL (165.36 mM), Sonication is recommended. Ethanol: 3 mg/mL (9.92 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3072 mL	16.536 mL	33.0721 mL
5 mM	0.6614 mL	3.3072 mL	6.6144 mL
10 mM	0.3307 mL	1.6536 mL	3.3072 mL
50 mM	0.0661 mL	0.3307 mL	0.6614 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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