

Trichostatin A

HDAC Inhibitor

Catalog # met-tsa-1, met-tsa-5

For research use only

Version # 10D09-MM

PRODUCT INFORMATION

Content:

Trichostatin A is supplied as an off-white to pale yellow color lipidic film.

- **met-tsa-1:** 1 mg
- **met-tsa-5:** 5 mg

Storage and stability:

- Trichostatin A is shipped at room temperature. Store at -20°C in a sealed tube. Product is stable for at least 1 year.

- Solutions reconstituted in DMSO should be stored at -20°C and are stable up to 6 months.

Quality control

Purity : >98% (HPLC)

CHEMICAL PROPERTIES

CAS n°: 58880-19-6

Formula: C₁₇H₂₂N₂O₃

Molecular weight: 302.37

Solubility: DMSO, ethanol (2 mg/ml)

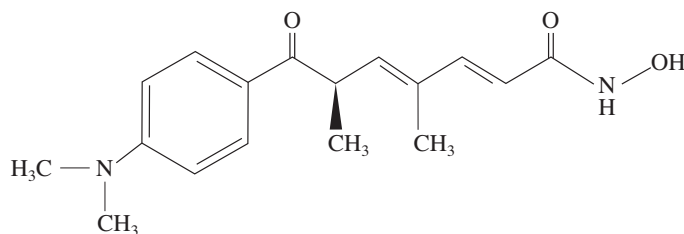
Working concentration: 100 ng/ml

DESCRIPTION

Trichostatin A (TSA), an antifungal antibiotic produced by *Streptomyces hygroscopicus*¹, is a potent and specific inhibitor of histone deacetylase (HDAC). HDAC is overexpressed in a variety of cancers and is closely correlated with oncogenic factors. TSA is active at a nanomolar concentration and causes accumulation of highly acetylated histone molecules in mammalian cells². TSA suppresses the activity of HDAC leading to an increase in histone acetylation. This histone acetylation induces an enhancement of the expression of specific genes that elicit extensive cellular morphologic and metabolic changes, such as growth arrest, differentiation and apoptosis. TSA has been shown to induce apoptosis in many cancer cells at submicromolar concentrations with very low toxicity toward normal cells.

1. Tsuji N. *et al.*, 1976. A new antifungal antibiotic, trichostatin. J Antibiot (Tokyo). 29(1):1-6.

2. Yoshida M. *et al.*, 1990. Potent and specific inhibition of mammalian histone deacetylase both in vivo and in vitro by trichostatin A. J Biol Chem. 265(28):17174-9.



TECHNICAL SUPPORT

Toll free (US): 888-457-5873
Outside US: (+1) 858-457-5873
Europe: +33 562-71-69-39
E-mail: info@invivogen.com
Website: www.invivogen.com



3950 Sorrento Valley Blvd. Suite A
San Diego, CA 92121 - USA