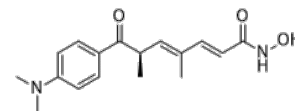


**Product Name** : Trichostatin A  
**Cat. No.** : PC-24323  
**CAS No.** : 58880-19-6  
**Molecular Formula** : C<sub>17</sub>H<sub>22</sub>N<sub>2</sub>O<sub>3</sub>  
**Molecular Weight** : 302.37  
**Target** : HDAC  
**Solubility** : 10 mM in DMSO



## Biological Activity

Trichostatin A (TSA) is a potent and specific, irreversible inhibitor of class I/II HDACs with IC<sub>50</sub> of 1.8 nM for HDAC. Trichostatin A potently inhibits purified histone deacetylase from wild-type FM3A cells with K<sub>i</sub> of 3.4 nM. Trichostatin A markedly prolongs the in vivo half-life of the labile acetyl groups on histones in mouse mammary gland tumor cells, FM3A. Trichostatin A inhibited proliferation of eight breast carcinoma cell lines with IC<sub>50</sub> of 26.4-308.1 nM. Trichostatin A exhibits antitumor efficacy and toxicity in vivo in a carcinogen-induced rat mammary cancer model.

## References

Yoshida M, et al. J Biol Chem. 1990 Oct 5;265(28):17174-9.  
Yoshida M, et al. J Antibiot (Tokyo). 1990 Sep;43(9):1101-6.  
Futamura M, et al. Oncogene. 1995 Mar 16;10(6):1119-23.  
Vigushin DM et al. Clin Cancer Res. 2001 Apr;7(4):971-6.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com