

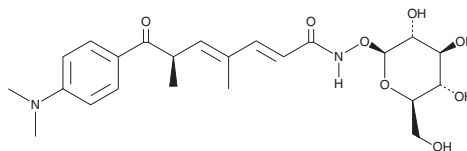
PRODUCT INFORMATION



Trichostatin C

Item No. 20220

CAS Registry No.: 68676-88-0
Formal Name: (2E,4E,6R)-7-[4-(dimethylamino)phenyl]-N-(b-D-glucopyranosyloxy)-4,6-dimethyl-7-oxo-2,4-heptadienamido
Synonym: Antibiotic 145-A
MF: C₂₃H₃₂N₂O₈
FW: 464.5
Purity: ≥95%
Supplied as: A powder
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Trichostatin C is supplied as a powder. A stock solution may be made by dissolving the trichostatin C in the solvent of choice, which should be purged with an inert gas. Trichostatin C is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Trichostatin C is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Trichostatin C is a glycosylated derivative of trichostatin A (Item No. 89730), the antifungal antibiotic that reversibly inhibits histone deacetylase.¹ Trichostatin C is reported to be the first example of a glucopyranosyl hydroxamate identified in nature.² It has been shown to induce the differentiation of a mouse erythroleukemia cell line and to increase histone H4 acetylation in B cells, though at higher concentrations than trichostatin A.^{3,4}

References

1. Mori, K. and Koseki, K. Synthesis of trichostatin A, a potent differentiation inducer of friend leukemic cells, and its antipode. *Tetrahedron* **44**, 6013-6020 (1988).
2. Tsuji, N., and Kobayashi, M. Trichostatin C, a glucopyranosyl hydroxamate. *J. Antibiot. (Tokyo)* **31(10)**, 939-944 (1978).
3. Yoshida, M., Iwamoto, Y., Uozumi, T., et al. Trichostatin C, a new inducer of differentiation of friend leukemic cells. *Agric. Biol. Chem.* **49(2)**, 563-565 (1985).
4. Kohge, T., Gohda, E., Okamura, T., et al. Promotion of antigen-specific antibody production in murine B cells by a moderate increase in histone acetylation. *Biochem. Pharmacol.* **56(10)**, 1359-1364 (1998).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM