

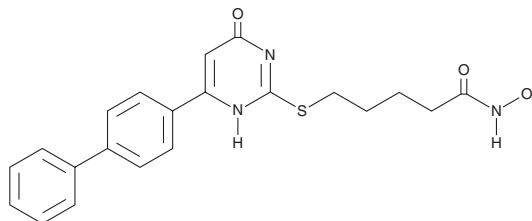
PRODUCT INFORMATION



MC1742

Item No. 29171

CAS Registry No.: 1776116-74-5
Formal Name: 5-[(4-[1,1'-biphenyl]-4-yl)-1,6-dihydro-6-oxo-2-pyrimidinyl]thio]-N-hydroxy-pentanamide
MF: C₂₁H₂₁N₃O₃S
FW: 395.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

MC1742 is supplied as a solid. A stock solution may be made by dissolving the MC1742 in the solvent of choice, which should be purged with an inert gas. MC1742 is soluble in the organic solvent DMSO at a concentration of approximately 100 mM.

Description

MC1742 is an inhibitor of class I histone deacetylases (HDACs; IC₅₀s = 0.1, 0.11, 0.02, and 0.61 μM for HDAC1, -2, -3, and -8, respectively) and class IIb HDACs (IC₅₀s = 7 and 40 nM for HDAC6 and HDAC10, respectively).¹ It is selective for class I and class IIb over class IIa HDACs (IC₅₀s = >50 μM for HDAC4, -5, -7, and -9). MC1742 reduces proliferation of HOS, MG-63, RD, A204, SK-ES-1, and A673 sarcoma cancer stem cells (CSCs). It increases levels of acetylated histone H3 and acetylated tubulin and induces apoptosis in MG-63 CSCs when used at a concentration of 2 μM. MC1742 also reactivates HIV-1 in JLAT 10.6 latently infected cells (EC₅₀ = 350 nM).²

References

1. Di Pompo, G., Salerno, M., Rotili, D., *et al.* Novel histone deacetylase inhibitors induce growth arrest, apoptosis, and differentiation in sarcoma cancer stem cells. *J. Med. Chem.* **58(9)**, 4073-4079 (2015).
2. Heffern, E.F.W., Ramani, R., Marshall, G., *et al.* Identification of isoform-selective hydroxamic acid derivatives that potently reactivate HIV from latency. *J. Virus Erad.* **5(2)**, 84-91 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/17/2022

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