

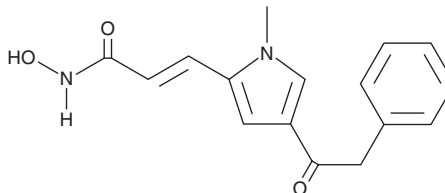
PRODUCT INFORMATION



APHA Compound 8

Item No. 21228

CAS Registry No.: 676599-90-9
Formal Name: N-hydroxy-3-[1-methyl-4-(2-phenylacetyl)-1H-pyrrol-2-yl]-2-propenamide
Synonym: MC 1353
MF: C₁₆H₁₆N₂O₃
FW: 284.3
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

APHA compound 8 is supplied as a solid. A stock solution may be made by dissolving the APHA compound 8 in the solvent of choice, which should be purged with an inert gas. APHA compound 8 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Description

APHA compound 8 is an inhibitor of class I histone deacetylases (HDACs; IC₅₀s = 3.7, 7.4, 0.42, and 2.8 μM for HDAC1, -2, -3, and -8, respectively) as well as class II HDACs (IC₅₀s = 3.1, 0.1, 3.1, and 4.2 μM for HDAC4, -6, -7, and -10, respectively).¹ It is selective for class I and II HDACs over class III HDACs (IC₅₀s = >30 μM for SIRT1, SIRT2, and SIRT3) and the histone acetyltransferase PCAF (IC₅₀ = >30 μM). At 48 hours post-infection, APHA compound 8 increases replication of oncolytic herpes simplex virus (oHSV) in MDA-MB-231 and 4T1 breast cancer cells when used prior to viral infection at concentrations of 10 and 50 μM.³

References

1. Blackwell, L., Norris, J., Suto, C.M., *et al.* The use of diversity profiling to characterize chemical modulators of the histone deacetylases. *Life Sci.* **82**(21-22), 1050-1058 (2008).
2. Cody, J.J., Markert, J.M., and Hurst, D.R. Histone deacetylase inhibitors improve the replication of oncolytic herpes simplex virus in breast cancer cells. *PLoS One* **9**(3), e92919 (2014).

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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