

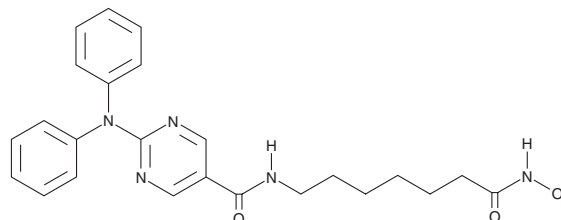
PRODUCT INFORMATION



ACY-1215

Item No. 21531

CAS Registry No.: 1316214-52-4
Formal Name: 2-(diphenylamino)-N-[7-(hydroxyamino)-7-oxoheptyl]-5-pyrimidinecarboxamide
Synonyms: ACY-63, Ricolinostat, Rocilinostat
MF: C₂₄H₂₇N₅O₃
FW: 433.5
Purity: ≥98%
UV/Vis.: λ_{max}: 289 nm
Supplied as: A crystalline 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

ACY-1215 is supplied as a crystalline solid. A stock solution may be made by dissolving the ACY-1215 in the solvent of choice, which should be purged with an inert gas. ACY-1215 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ACY-1215 in these solvents is approximately 5 mg/ml.

ACY-1215 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ACY-1215 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ACY-1215 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ACY-1215 is an inhibitor of the class IIb histone deacetylase (HDAC) HDAC6 (IC₅₀ = 0.0047 μM).¹ It is selective for HDAC6 over the class I HDACs HDAC1, -2, -3, and -8 (IC₅₀s = 0.058, 0.048, 0.051, and 0.1 μM, respectively), class IIa HDACs HDAC4, -5, -7, and -9 (IC₅₀s = 7, 5, 1.4 and >10 μM, respectively), class III HDACs sirtuin 1 (SIRT1) and SIRT2 (IC₅₀s = >10 μM for both), and the class IV HDAC HDAC11 (IC₅₀ = >10 μM). ACY-1215 (0.5-2.5 μM) induces accumulation of acetylated α-tubulin in OCI-LY10 diffuse large B cell lymphoma (DLBCL) cells and induces cytotoxicity in several multiple myeloma cell lines (IC₅₀s = 2-8 μM).^{1,2} It decreases tumor volume and increases survival in an OCI-LY10 mouse xenograft model when administered at a dose of 50 mg/kg in combination with the 20S proteasome inhibitor bortezomib (Item No. 10008822).² ACY-1215 also decreases liver and kidney cyst area and liver fibrosis in PCK rats in a model of polycystic liver disease.³

References

1. Santo, L., Hideshima, T., Kung, A.L., et al. *Blood* **119**(11), 2579-2589 (2012).
2. Amengual, J.E., Johannet, P., Lombardo, M., et al. *Clin. Cancer Res.* **21**(20), 4663-4675 (2015).
3. Gradilone, S.A., Habringer, S., Masyuk, T.V., et al. *Am. J. Pathol.* **184**(3), 600-608 (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.

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, 04/11/2023

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