

PRODUCT INFORMATION



CUDC-907

Item No. 25651

CAS Registry No.: 1339928-25-4
Formal Name: N-hydroxy-2-[[[2-(6-methoxy-3-pyridinyl)-4-(4-morpholinyl)thieno[3,2-d]pyrimidin-6-yl)methyl]methylamino]-5-pyrimidinecarboxamide

MF: C₂₃H₂₄N₈O₄S

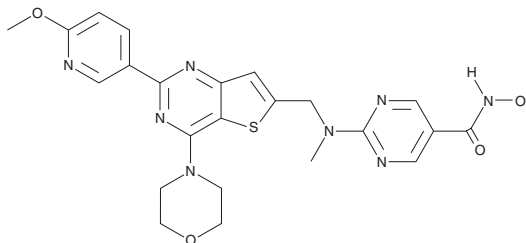
FW: 508.6

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

CUDC-907 is supplied as a solid. A stock solution may be made by dissolving the CUDC-907 in the solvent of choice. CUDC-907 is soluble in the organic solvent DMSO, which should be purged with an inert gas.

Description

CUDC-907 is a dual inhibitor of HDACs and phosphatidylinositol 3-kinases (PI3Ks).¹ It inhibits HDAC activity in HeLa nuclear extracts (IC₅₀ = <0.1 μM) as well as the PI3K isoforms PI3Kα, PI3Kβ, PI3Kγ, and PI3Kδ (IC₅₀s = <0.1, <1, <1, and <0.1 μM, respectively, for human recombinant enzymes). CUDC-907 inhibits cell growth in a panel of colon, pancreatic, non-small cell lung cancer (NSCLC), and multiple myeloma cells (IC₅₀s = <10-100 nM). It induces cell cycle arrest at the G₂/M phase and apoptosis and decreases cellular migration and invasion in FTC-133, THJ-29T, XTC-1, and 8505C thyroid cancer cell lines in a concentration-dependent manner.² CUDC-907 (75 mg/kg) reduces tumor growth, the number of liver metastases, and HDAC2 expression in tumor tissue in the FTC-133 mouse xenograft model.

References

1. Bao, R., Chengjung, L., and Changgeng, Q. Treatment of cancers having k-ras mutations. *Curis, Inc.* **WO2011130628A1** (2011).
2. Kotian, S., Zhang, L., Boufraqech, M., *et al.* Dual Inhibition of HDAC and tyrosine kinase signaling pathways with CUDC-907 inhibits thyroid cancer growth and metastases. *Clin. Cancer Res.* **23(17)**, 5044-5054 (2017).

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