

Product Data Sheet

Product Name: CAY17c
Cat. No.: GC49029

Chemical Properties

Cas. No. 2414373-11-6

SMILES CN1CC2=C(CC1)C3=C(N=C(NC3=O))C4=CC(C)=C(C(C)=C4)OCCCCC(=O)NOS2

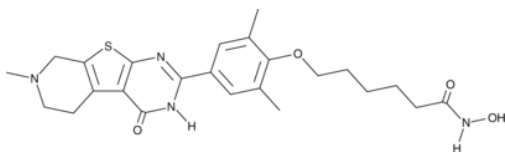
Formula C₂₄H₃₀N₄O₄S M.Wt 470.6

Solubility DMF: slightly soluble, DMSO: slightly soluble Storage -20°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution: ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



Background

CAY17c is an inhibitor of bromodomain-containing protein 4 (BRD4; IC₅₀ = 0.71 μM), as well as class I histone deacetylases (HDACs; IC₅₀s = 0.046, 0.058, 0.075, and 0.167 μM for HDAC1, -2, -3, and -8, respectively) and class IIb HDACs (IC₅₀s = 0.073 and 0.923 μM for HDAC6 and HDAC10, respectively).¹ It is selective for these enzymes over BRD2, -3, and -T (IC₅₀s = >20 μM for all), as well as over HDAC4, -5, -7, -9, and -11 (IC₅₀s = >10 μM for all). CAY17c inhibits the proliferation of HCT116, SW620, and DLD-1 colorectal cancer cells (IC₅₀s = 0.45, 1.78, and 2.11 μM, respectively), as well as induces apoptosis and autophagy in HCT116 cells. It reduces tumor growth in an HCT116 mouse xenograft model when administered at doses of 15 and 30 mg/kg.

1. Pan, Z., Li, X., Wang, Y., et al. Discovery of thieno[2,3-d]pyrimidine-based hydroxamic acid derivatives as bromodomain-containing protein 4/histone deacetylase dual inhibitors induce autophagic cell death in colorectal carcinoma cells. *J. Med. Chem.* 63(7)3678-3700(2020)

Caution: Product has not been fully validated for medical applications. For research use only.

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