

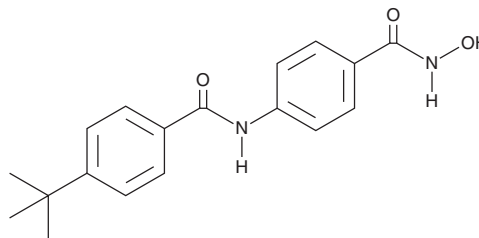
PRODUCT INFORMATION



AES-350

Item No. 30607

CAS Registry No.: 847249-57-4
Formal Name: 4-[[4-(1,1-dimethylethyl)benzoyl]amino]-N-hydroxy-benzamide
MF: C₁₈H₂₀N₂O₃
FW: 312.4
Purity: ≥98%
UV/Vis.: λ_{max}: 283 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

AES-350 is supplied as a crystalline solid. A stock solution may be made by dissolving the AES-350 in the solvent of choice, which should be purged with an inert gas. AES-350 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AES-350 in ethanol is approximately 1 mg/ml and 30 mg/ml in DMSO and DMF.

AES-350 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AES-350 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AES-350 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AES-350 is an inhibitor of class I histone deacetylases (HDACs; IC₅₀s = 0.605, 0.187, and 0.245 μM for HDAC1, -3, and -8, respectively) and class IIb HDACs (IC₅₀s = 0.0244 and 0.899 μM for HDAC6 and HDAC10, respectively).¹ It is selective for class I and class IIb HDACs over HDAC2, -4, -5, -7, -9, and -11 (IC₅₀s = >1 μM for all). AES-350 is cytotoxic to MV4-11, MOLM-13, and MRC-9 cells (IC₅₀s = 0.576, 6, and 33.2 μM, respectively). It induces apoptosis in MV4-11 cells in a concentration-dependent manner.

Reference

1. Shouksmith, A.E., Gawel, J.M., Nawar, N., *et al.* Class I/IIb-selective HDAC inhibitor exhibits oral bioavailability and therapeutic efficacy in acute myeloid leukemia. *ACS Med. Chem. Lett.* **11(1)**, 56-64 (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.

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