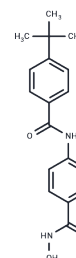


AES-350

Chemical Properties

CAS No. : 847249-57-4
 Formula: C₁₈H₂₀N₂O₃
 Molecular Weight: 312.36
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	AES-350 is a potent and orally active HDAC6 inhibitor (IC ₅₀ and K _i of 0.0244 μM and 0.035 μM, respectively), also exhibiting activity against HDAC-3, -8, and -11 in an enzymatic assay with IC ₅₀ values of 0.187 μM, 0.245 μM, and >1 μM, respectively. AES-350 triggers apoptosis in AML cells through HDAC inhibition and can be used for acute myeloid leukemia (AML) research.
Targets(IC ₅₀)	Apoptosis,HDAC
In vitro	AES-350 (0.25-4 μM;?18 hours) induces MV4-11 cells apoptosis in a dose-dependent manner.?The late apoptosis ratios are 8.74%, 11.7%,16.08%, 30.97%, and 38.48%, respectively at 0.25 μM-4 μM.?AES-350 has submicromolar activity (IC ₅₀ =0.58±0.13 μM) against MV4-11 cells than to that of vorinostat (IC ₅₀ =0.31±0.061 μM).?AES-350 is more ligand efficient and exemplifies a large therapeutic index (IC ₅₀ >30 μM in noncancerous MRC-9 cells).?AES-350 is also shown to be effective in AML-3 (acute myeloid leukemia) cells (IC ₅₀ =0.73 ± 0.12 μM).?An ELISA is performed using HeLa cervical cancer cell lysates, and HeLa cells highly express HDAC6 and are sensitive to AES-350.? Correspondingly, ELISA assays depicted a dose-dependent increase in HDAC6 inhibition (IC ₅₀ =0.58±0.13 μM), Western blot analysis shows that AES-350 (0.1-10 μM) induces a dose-dependent increase in acetylated α-tubulin (Ac-α-tubulin), a substrate of HDAC.

Solubility Information

Solubility	DMSO: 100 mg/mL (320.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (12.81 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2014 mL	16.0072 mL	32.0143 mL
5 mM	0.6403 mL	3.2014 mL	6.4029 mL
10 mM	0.3201 mL	1.6007 mL	3.2014 mL
50 mM	0.064 mL	0.3201 mL	0.6403 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Andrew E Shouksmith, et al. Class I/IIb-Selective HDAC Inhibitor Exhibits Oral Bioavailability and Therapeutic Efficacy in Acute Myeloid Leukemia.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481