Screening Libraries

Inhibitors

Boc-Lys(Ac)-AMC

Cat. No.: HY-138159 CAS No.: 233691-67-3 Molecular Formula: $C_{23}H_{31}N_3O_6$ Molecular Weight: 445.51

Target: HDAC; Fluorescent Dye

Pathway: Cell Cycle/DNA Damage; Epigenetics; Others

Storage: -20°C, sealed storage, away from moisture and light

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (224.46 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	2.2446 mL	11.2231 mL	22.4462 mL	
	5 mM	0.4489 mL	2.2446 mL	4.4892 mL	
	10 mM	0.2245 mL	1.1223 mL	2.2446 mL	

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	$Boc-Lys(Ac)-AMC\ is\ a\ cell-permeable\ fluorometric\ HDAC\ substrate\ (Ex/Em=355\ nm/460\ nm)^{[1][2]}.$
In Vitro	Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs). Tissue culture-based HDAC assay ^[2] 1. Apply 25 μM Boc-Lys(Ac)-AMC to the overnight culture seeded from 6 × 10 ⁴ cells in 100 mL medium in 96-well tissue culture plates. 2. Incubate 2-3 h at 37°C with 5% CO ₂ atmosphere. 3. Terminate the deacetylation reaction by addition of HDAC developer solution containing cell lysis buffer and trypsin reagents. 4. Incubate 15 min at room temperature. 5. Measure the fluorescent signal of AMC by SpectraMax M5 microplate reader at Ex/Em = 355 nm/460 nm. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Reddy DS, et al. Measuring	; Histone Deacetylase Inhibit	ion in the Brain. Curr Protoc Pha	rmacol. 2018 Jun;81(1):e41.				
[2]. Ueki N, et al. Selective cancer targeting with prodrugs activated by histone deacetylases and a tumour-associated protease. Nat Commun. 2013;4:2735.							
	Caution: Product has r	not been fully validated for m	edical applications. For resear	ch use only.			
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