A 485

货号：A2658

储存条件：粉末-20°C 可保存 3 年；液体-80°C 可保存 12 月。

产品描述

The histone acetyltransferase paralogs p300 and CBP (p300/CBP) are transcriptional co-activators, essential for a multitude of cellular events and the pathogenesis of multiple human diseases. A-485 is a potent, selective, drug-like p300/CBP catalytic inhibitor. It inhibited the activity of the p300-BHC (bromodomain-HAT-C/H3) domain and CBP-BHC with IC50 values of 9.8nM and 2.6nM, respectively. A-485 bound to p300-HAT with a K_D of 15±1nM. Treatment of prostate adenocarcinoma PC-3 cells with A-485 for 3h resulted in a concentration-dependent reduction in H3K27Ac with an EC_{50} of 73nM. In androgen-dependent LnCaP-FGC cell line, treatment with A-485 for 7 and 24h decreased DHT-stimulated PSA expression more potently compared to AR antagonist enzalutamide. A-485 also downregulated 40% of DHT-responsive genes in androgen-depleted 22Rv1 cells. In male SCID mice, twice daily intraperitoneal injection of A-485 (twice per day) resulted in 54% tumor growth inhibition after 21 days of dosing as compared to vehicle-treated controls. Also, treatment with A-485 in tumor-bearing animals for 7 days decreased the mRNA levels of AR-dependent gene, SLC45A3, and c-Myc, at 3h after dosing.

作用机制

A-485 is a potent, selective p300/CBP inhibitor that binds to the catalytic active site of p300 and inhibits p300/CBP in an acetyl-CoA competitive manner. The methyl-urea of A-485 is inserted through the L1 loop where two hydrogen bonds are formed.

产品信息

CAS 号	1889279-16-6	
分子式	C25H24F4N4O5	
分子量	536.48	
溶解度	DMSO	100.0 mg/mL (186.4 mM)
	Water	Insoluble
	Ethanol	100.0 mg/mL (186.4 mM)