PRODUCT INFORMATION



CAY10603

Item No. 13146

CAS Registry No.:	1045792-66-2	
Formal Name:	N-[4-[3-[[[7-(hydroxyamino)-7-oxoheptyl]	
	amino]carbonyl]-5-isoxazolyl]phenyl]-	
	carbamic acid, 1,1-dimethylethyl ester	O
Synonyms:	HDAC 6 inhibitor,	
	Histone Deacetylase Inhibitor VIII	
MF:	C ₂₂ H ₃₀ N ₄ O ₆	
FW:	446.5	
Purity:	≥95%	
UV/Vis.:	λ _{max} : 300 nm	H' ON II
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

CAY10603 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10603 in the solvent of choice, which should be purged with an inert gas. CAY10603 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10603 in these solvents is approximately 20 and 15 mg/ml, respectively.

Description

Histone deacetylase 6 (HDAC6) is a class II HDAC that represses transcription by removing acetyl groups from histones. In addition, HDAC6 deacetylases tubulin, which is important in regulating microtubule stability and function. CAY10603 is a potent and selective inhibitor of HDAC6 (IC₅₀ = 0.002 nM, as compared with 271, 252, 0.42, 6851, and 90.7 nM for HDAC1, 2, 3, 8, and 10, respectively).¹ Also, CAY10603 prevents the growth of several pancreatic cancer cell lines (IC₅₀ = 0.1-1 μ M).¹ The HDAC6 inhibitor is more active in inhibiting cell growth than the broad spectrum HDAC inhibitor suberoylanilide hydroxamic acid (SAHA).

References

1. Kozikowski, A.P., Tapadar, S., Luchini, D.N., et al. Use of the nitrile oxide cycloaddition (NOC) reaction for molecular probe generation: A new class of enzyme selective histone deacetylase inhibitors (HDACIs) showing picomolar activity at HDAC6. J. Med. Chem. 51(15), 4370-4373 (2008).

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.

WARRANTY AND LIMITATION OF REMEDY

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