



HDAC1 Inhibitor Screening Assay Kit

Product Information

Cat.No.

Kit-0429

Product Overview

HDAC1 Inhibitor Screening Assay Kit is a fluorescence-based method for screening HDAC1 inhibitors.

Description

Nucleosomes, which fold chromosomal DNA, contain two molecules each of the core histones H2A, H2B, H3, and H4. Almost two turns of DNA are wrapped around this octameric core, which represses transcription. The histone amino termini extend from the core, where they can be modified post-translationally by acetylation, phosphorylation, ubiquitination, and methylation, affecting their charge and function. Acetylation of the ε-amino groups of specific histone lysines is catalyzed by histone acetyltransferases (HATs) and correlates with an open chromatin structure and gene activation. Histone deacetylases (HDACs) catalyze the hydrolytic removal of acetyl groups from histone lysine residues and correlates with chromatin condensation and transcriptional repression. Therefore, HDAC inhibition results in transcriptional activation through the conformational relaxation of DNA. Changes in the transcription of key genes has linked HDAC inhibitors to blocking angiogenesis and cell cycling, and promoting apoptosis and differentiation. By targeting these key components of tumor proliferation, HDAC inhibitors are currently being explored as potential anticancer agents.

Usage

For research use only (RUO)

Storage

This kit will perform as specified if stored as directed at -80°C and used before the expiration date indicated on the outside of the box. HDAC Assay Buffer (10X) -20°C HDAC1 (human recombinant) -80°C HDAC Trichostatin A -20°C HDAC Substrate -20°C 96-Well Plate (Black) Room temperature HDAC Developer -20°C 96-Well Cover Sheet Room temperature

Kit Components



CREATIVE **BIOMART**[®]
Assay Kit

HDAC1 Inhibitor Screening Assay Kit

HDAC Assay Buffer (10X) 1 vial HDAC1 (human recombinant) 1 vial HDAC Trichostatin A 1 vial HDAC Substrate 1 vial 96-Well Plate (Black) 1 plate HDAC Developer 2 vials 96-Well Cover Sheet 1 cover

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