

## HDAC Activity Fluorometric Assay Kit

### Product Information

**Cat**

Kit-0423

**Common Name**

HDAC

**Cat.No.**

Kit-0423

### Product Overview

Simple procedure; just requires two easy steps.

Direct, Fast, Fluorescence based.

Kit contains all necessary reagents for measuring InSitu HDAC activity in adherent or suspension cells.

### Description

Histone acetylases (HAT's) and Histone deacetylases (HDAC's) are associated with regulation of gene expression. In general, increased levels of histone acetylation are associated with increased transcriptional activity, whereas decreased levels of acetylation are associated with repression of gene expression. HDAC's are localized in both the cytosol and nucleus and some shuttle between the nucleus and cytosol. Increased HDAC expression has been observed in various cancers. InSitu HDAC Activity Fluorometric Assay Kit provides a direct, fast, fluorescence-based method to measure the InSitu HDAC activity. The procedure requires two easy steps, all performed in the same cell culture plate. First, the cell permeable HDAC Substrate, which comprises an acetylated lysine side chain, is incubated with cells grown in a 96-well plate. Inside the cells, HDAC deacetylates the substrate. The second step involves lysing the cells and treating with the Developer that produces a fluorophore from the Deacetylated HDAC Substrate. The generated fluorescence can be quantified at Ex/Em = 368/442 nm. The assay is well suited for high throughput screening applications.

### Applications

## HDAC Activity Fluorometric Assay Kit

Measurement of HDAC activity in cells in 96-well format.

Screening HDAC inhibitors or activators.

Studying growth factors or other regulators that influence HDAC activity.

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### Usage

For Research Use Only! Not For Use in Humans

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### Storage

-20°C

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### Size

100 assays

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### Kit Components

- HDAC Assay Buffer
- HDAC Substrate
- Developer
- HDAC Inhibitor (Trichostatin A [TSA], 1 mM)
- Positive Control (Jurkat Cell Lysate)
- Standard (Deacetylated Substrate, 4 mM)

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**Detection method** Fluorescence (Ex/Em = 368/442 nm)

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### Compatible Sample Types

Cultured adherent or suspension cells.

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