

## Product datasheet

# Histone Acetyltransferase Activity Assay Kit (Colorimetric) ab65352

★★★★★ 1 Abreviews 14 References 3 Images

### Overview

<b>Product name</b>	Histone Acetyltransferase Activity Assay Kit (Colorimetric)
<b>Detection method</b>	Colorimetric
<b>Sample type</b>	Tissue Extracts, Cell Lysate
<b>Assay type</b>	Enzyme activity
<b>Species reactivity</b>	<b>Reacts with:</b> Mammals, Other species
<b>Product overview</b>	<p>Abcam's Histone Acetyltransferase Activity Assay Kit offers a convenient, nonradioactive system for a rapid and sensitive detection of HAT activity in mammalian samples. The kit utilizes active Nuclear Extract (NE) as a positive control and acetyl-CoA as a cofactor. Acetylation of peptide substrate by active HAT releases the free form of CoA which then serves as an essential coenzyme for producing NADH. NADH can easily be detected spectrophotometrically upon reacting with a soluble tetrazolium dye. The detection can be continuous and suitable for kinetic studies. The kit provides a simple, straightforward protocol for a complete assay. Visit our <a href="#">FAQs page</a> for tips and troubleshooting.</p> <p>HAT assay protocol summary:</p> <ul style="list-style-type: none"> <li>- add samples to wells</li> <li>- add HAT assay mix</li> <li>- incubate for 1-4 hrs</li> <li>- analyze with microplate reader</li> </ul>
<b>Notes</b>	Histone acetyltransferases (HATs) have been implicated to play a crucial role in various cellular functions, such as gene transcription, differentiation, and proliferation.
<b>Platform</b>	Microplate reader

### Properties

**Storage instructions** Store at -80°C. Please refer to protocols.

Components	Identifier	100 tests
2X HAT Assay Buffer	Amber	1 x 7.5ml

Components	Identifier	100 tests
HAT Reconstitution Buffer	Clear	1 x 1.8ml
HAT Substrate I	Blue	1 vial
HAT Substrate II	Red	1 vial
NADH Generating Enzyme	Green	1 x 800µl
Nuclear Extract (4 mg/ml )	Violet	1 x 50µl

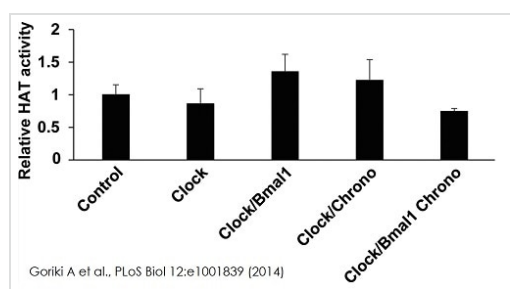
## Relevance

Histone acetyltransferases (HAT) are enzymes that acetylate conserved lysine amino acids on histone proteins. They have been implicated to play a crucial role in various cellular functions, such as gene transcription, differentiation, and proliferation.

## Cellular localization

Cytoplasmic and Nuclear. Note=Nuclear in S-phase cells and cytoplasmic.

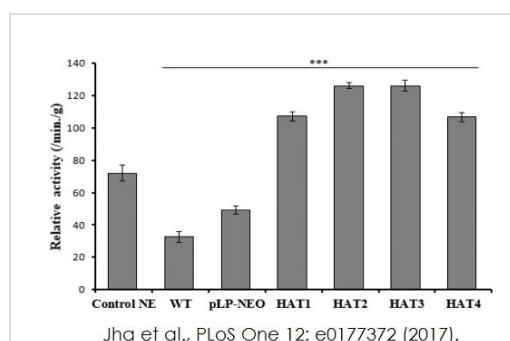
## Images



HAT activity in NIH3T3 cells, which were transfected with the desired plasmids by using Lipofectamine 2000. After 24 hours from transfection, the nuclear protein was extracted and the Histone acetyltransferase activity was measured by using ab65352.

### Functional studies - ab65352

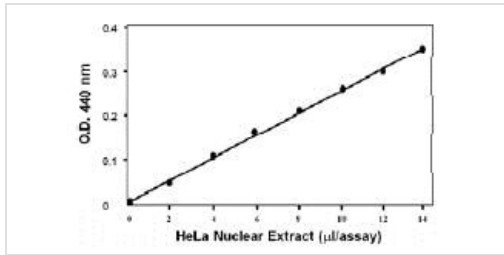
Image from Goriki A et al., PLoS Biol 12(4), Figure S11. doi:10.1371/journal.pbio.1001839. Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>



Histone acetylation activity assay for *L.donovani* cells over-expressing HAT1, HAT2, HAT3 and HAT4. The activities were compared to wild-type (WT) cells and pLPneo2 (vector) only transfected cells. The relative activity was determined using Histone Acetyltransferase activity assay kit (ab65352).

### Functional studies - ab65352

Image from Jha et al., PLoS One 12(5), fig 2C. doi: 10.1371/journal.pone.0177372. Reproduced under the Creative Commons license <http://creativecommons.org/licenses/by/4.0/>



Functional Studies - Histone Acetyltransferase Activity Assay Kit (Colorimetric) (ab65352)

Analysis of Histone Acetyltransferase Activity in HeLa Nuclear Extract using ab65352. HeLa nuclear extract in various amounts was incubated with HAT substrate. Activity was analyzed in a micro plate reader at 440 nm according to the kit instructions.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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