



## Histone H4 Acetylation Assay Kit

### Product Information

#### Cat.No.

Kit-0459

#### Product Overview

Histone H4 Acetylation Assay Kit is use for measuring acetylation of histone H4.

#### Description

Acetylation of histones including histone H4 has been involved in the regulation of chromatin structure and the recruitment of transcription factors to gene promoters. Histone acetyltransferases (HATs) and histone deacetylases (HDACs) play critical roles in controlling histone acetylation. Histone acetylation is tightly involved in cell cycle regulation, cell proliferation, and apoptosis. Reversible acetylation of nucleosomal histones H4 generally is believed to be correlated with potential transcriptional activity of eukaryotic chromatin domains. Histone H4 acetylation may be increased by inhibition of HDACs and decreased by HAT inhibition. There are very few methods used for measuring histone H4 acetylation. The Histone H4 Acetylation Assay Kit addresses this problem by providing a unique procedure to measure acetylation of histone H4.

#### Applications

The Histone H4 Acetylation Assay Kit is suitable for specifically measuring histone H4 acetylation using a variety of mammalian cells including fresh and frozen tissues, and cultured adherent and suspension cells.

#### Usage

For research use only (RUO)

#### Storage

Upon receipt:Store GE8 and acetylated histone H4 Control at  $-20^{\circ}\text{C}$  away from light.Store GE3, GE5, GE6, GE7, GE9 and 8-well Assay Strips at  $4^{\circ}\text{C}$  away from light.Store all other components at room temperature. The components of the kit should be stable for 6 months when stored properly.Note: Chek if wash buffer, GE3, contains salt precipitates before using. If so, warm (at room temperature or  $37^{\circ}\text{C}$ ) and shake the buffer until the salts are re-dissolved.



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### Kit Components

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GE1 (10X Lysis Buffer) 10 mlGE2 (Extraction Buffer) 16 mlGE3 (10X Wash Buffer) 28 mlGE4 (Histone Buffer) 1 mlGE5 (Blocking Buffer) 20 mlGE6 (Antibody Buffer) 12 mlGE7 (Capture Antibody, 100 &mu;g/ml)\* 50 &mu;lGE8 (Detection Antibody, 400 &mu;g/ml)\* 20 &mu;lGE9 (Developing Solution) 10 mlGE10 (Stop Solution) 6 mlAcetylated Histone H4 Control (60 &mu;g/ml)\* 20 &mu;l8-well Assay Strip (with Frame) 12 strips\* For maximum recovery of the products, centrifuge the original vial after thawing prior to opening the cap.

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### Features & Benefits

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Quick and efficient, can be finished within 5 hours. Innovative colorimetric assay with no need for radioactivity, electrophoresis, or chromatography. Strip microplate format makes the assay flexible: manual or high throughput. Simple, reliable, and consistent assay conditions.

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