



Histone H3 Acetylation Assay Kit

Product Information

Cat.No.

Kit-0448

Product Overview

Histone H3 Acetylation Assay Kit is use for measuring acetylation of histone H3.

Description

Acetylation of histones including histone H3 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 a critical role in controlling histone H3 acetylation. Histone acetylation is tightly involved in cell cycle regulation, cell proliferation and apoptosis. An imbalance in the equilibrium of histone acetylation has been associated with tumorigenesis and cancer progression. Histone H3 acetylation may be increased by inhibition of HDACs and decreased by HAT inhibition. Currently there are few methods used for measuring histone H3 acetylation. The Histone H3 Acetylation Assay Kit addresses this problem by providing a unique procedure to measure acetylation of histone H3.

Applications

For specifically measuring histone H3 acetylation using a variety of mammalian cells including fresh and frozen tissues, cultured adherent and suspension cells.

Usage

For research use only (RUO)

Storage

Upon receipt: (1) Store acetylated histone H3 control and GF8 at - 20°C away from light; (2) Store GF3, GF5, GF6, GF7, GF9 and 8 well assay strips at 4°C away from light; (3) Store all other components at room temperature. The kit is stable for up to 6 months from the shipment date, when stored properly. Note: Check if wash buffer, GF3, contains salt precipitates before using. If so, warm (at room temperature or 37°C) and shake the buffer until the salts are re-dissolved.



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Kit Components

GF1 (10X Lysis Buffer) 10 ml GF2 (Extraction Buffer) 16 ml GF3 (10X Wash Buffer) 28 ml GF4 (Histone Buffer) 1 ml GF5 (Blocking Buffer) 20 ml GF6 (Antibody Buffer) 12 ml GF7 (Capture Antibody, 100 µg/ml)* 50 µl GF8 (Detection Antibody, 400 µg/ml)* 20 µl GF9 (Developing Solution) 10 ml GF10 (Stop Solution) 6 ml Acetylated Histone H3 control (60 µg/ml)* 20 µl 8 well assay strip (with frame) 12* For maximum recovery of the products, centrifuge the original vial after thawing prior to opening the cap.

Features & Benefits

Quick and efficient, can be finished within 5 hours. Innovative colorimetric assay without the need for radioactivity, electrophoresis, or chromatography. Strip microplate format makes the assay flexible: manual or high throughput. Simple, reliable, and consistent assay conditions.
