Product name: Histone H3 Total Acetylation Detection Fast Kit (Colorimetric) ab115124

Detection method: Colorimetric

Sample type: Tissue, Adherent cells, Suspension cells

Sensitivity: 2 ng

Range: 2 ng - 100 ng

Assay time: 2h 30m

Species reactivity: Reacts with: Mouse, Cow, Human

Predicted to work with: Mammals

Product overview:
Acetylation of histones such as histone H3 has been involved in the regulation of chromatin structure and the recruitment of transcription factors to gene promoters. HAts (histone acetyltransferases) and HDACs (histone deacetylases) play a critical role in controlling histone H3 acetylation. Histone acetylation is tightly involved in cell cycle regulation, cell proliferation and apoptosis. The reversible lysine acetylation of histone H3 may play a vital role in the regulation of many cellular processes including chromatin dynamics and transcription, gene silencing, cell cycle progression, apoptosis, differentiation, DNA replication and repair, nuclear import and neuronal repression.

Histone H3 Total Acetylation Detection Fast Kit (Colorimetric) allows the user to colorimetrically detect and quantify if histone H3 is acetylated. The kit is ready-to-use and provides all the essential components needed to carry out a successful assay experiment. ab115124 is suitable for specifically measuring total histone H3 acetylation using a variety of mammalian cells including fresh and frozen tissues, and cultured adherent and suspension cells.

Platform: Microplate reader

Storage instructions:
Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>Identifier</th>
<th>48 tests</th>
<th>96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>10X Wash Buffer</td>
<td>1 x 10ml</td>
<td>1 x 20ml</td>
<td></td>
</tr>
<tr>
<td>8-Well Sample Strips (with Frame)</td>
<td>4 units</td>
<td>9 units</td>
<td></td>
</tr>
</tbody>
</table>
The differences in H3 acetylation level in fetal livers (female fetuses aged 19 dpc) from F1, F2, and F3 generations, measured with ab113476. Histones were prepared using ab115124. Asterisk indicates a significant difference between the respective C and R groups: * * P < 0.01; NS not significant. Data presented as the means ± SE (n = 6 per group).

Functional Studies - Histone H3 Total Acetylation Detection Fast Kit (Colorimetric) (ab115124)

Nowacka-Woszuk, Joanna et al., PloS one?vol. 13,2 e0193464., Fig 4, doi:10.1371/journal.pone.0193464

Acetylation Histone 3 per mg of extracted histones from murine tissue preparations (extracted using ab113476; 20-500 ng per well) (duplicates +/- SD).
Functional Assay: ab115124 Histone H3 Total Acetylation Detection Fast Kit (Colorimetric)

Standard curve with background signal subtracted (duplicates; +/- SD).

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

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