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Catalog Number:82807-2-PBS

| Basic Information | Catalog Number: 82807-2-PBS | GenBank Accession Number: BC066245 | Purification Method: Protein A purification |
| :---: | :---: | :---: | :---: |
|  | Size: <br> $1 \mathrm{mg} / \mathrm{ml}$ | $\begin{aligned} & \text { GeneID (NCBI): } \\ & 8350 \end{aligned}$ | CloneNo.: 3D23 |
|  | Source: <br> Rabbit | UNIPROT ID: P68431 |  |
|  | Isotype: $\operatorname{lgG}$ | Full Name: <br> histone cluster 1, H3a |  |
|  |  | Observed MW: $18 \mathrm{kDa}$ |  |

## Applications

Tested Applications:
WB,Indirect ELISA
Species Specificity:
Human, mouse, rat

## Background Information

Histones are small, highly basic proteins that consist of a globular domain with unstructured N - and C -terminal tails protruding from the main structure. Histone H 3 is one of the five main histones that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, $\mathrm{H} 2 \mathrm{~B}, \mathrm{H} 3$, and H 4 ) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. In addition to their role in DNA compartmentalization, histones also play crucial roles in various biologic processes, including gene expression and regulation, DNA repair, chromatin condensation, cell cycle progression, chromosome segregation, and apoptosis. The ability of histones to regulate chromatin dynamics primarily originates from various posttranslational modifications carried out by histone-modifying enzymes.

Storage

Storage:
Store at $-80^{\circ} \mathrm{C}$.
Storage Buffer:
PBS Only

Selected Validation Data


Various lysates were subjected to SDS PAGE
followed by western blot with 82807-2-RR
(HIST1H3A antibody) at dilution of 1:5000
incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82807-2-PBS in a different storage buffer formulation.

