

For Research Use Only

# Histone H3 Recombinant antibody

Catalog Number: 81984-2-RR



## Basic Information

**Catalog Number:**

81984-2-RR

**Size:**

1000 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG10644

**GenBank Accession Number:**

BC015544

**GeneID (NCBI):**

333932

**UNIPROT ID:**

Q71DI3

**Full Name:**

histone cluster 2, H3a

**Calculated MW:**

136 aa, 15 kDa

**Observed MW:**

15 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

241079B2

**Recommended Dilutions:**

WB 1:5000-1:50000

## Applications

**Tested Applications:**

WB, FC (Intra), ELISA

**Species Specificity:**

human, mouse, rat

**Positive Controls:**

WB : HeLa cells, A549 cells, mouse brain tissue, mouse kidney tissue, mouse skeletal muscle tissue, rat brain tissue

## Background Information

Histone-H3, histone cluster 2, H3a is the core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machinery which requires DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Histone-H3 is expressed during S phase; then expression strongly decreases as cell division slows down during the process of differentiation.

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

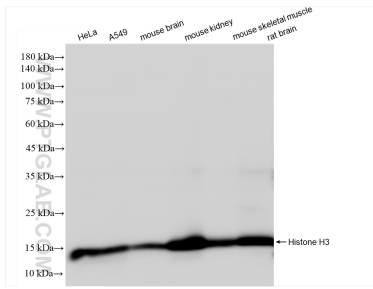
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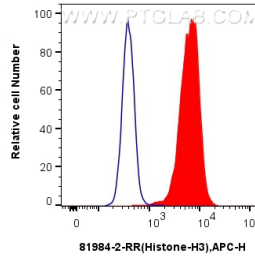
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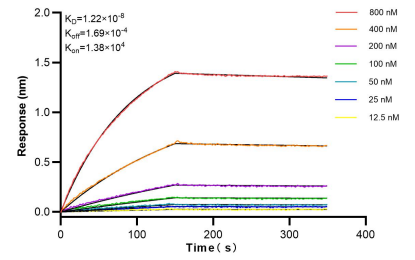
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 81984-2-RR (Histone H3 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours.



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.25  $\mu$ g Histone H3 Recombinant antibody (81984-2-RR, Clone:241079B2) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Bioluminescence resonance energy transfer (BRET) kinetic assays of 81984-2-RR against Human Histone H3 were performed. The affinity constant is 12.2 nM.