

For Research Use Only

# Histone H3 Recombinant antibody, PBS Only

Catalog Number: 81984-2-PBS



## Basic Information

<b>Catalog Number:</b> 81984-2-PBS	<b>GenBank Accession Number:</b> BC015544	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 333932	<b>CloneNo.:</b> 241079B2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q71DI3	
<b>Isotype:</b> IgG	<b>Full Name:</b> histone cluster 2, H3a	
<b>Immunogen Catalog Number:</b> AG10644	<b>Calculated MW:</b> 136 aa, 15 kDa	
	<b>Observed MW:</b> 15-17 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## 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

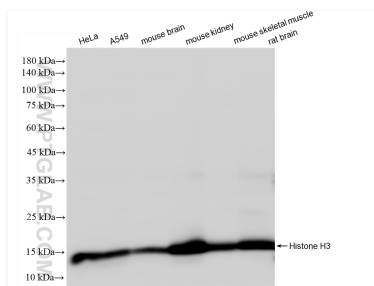
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

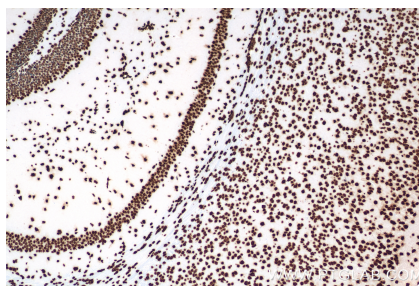
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

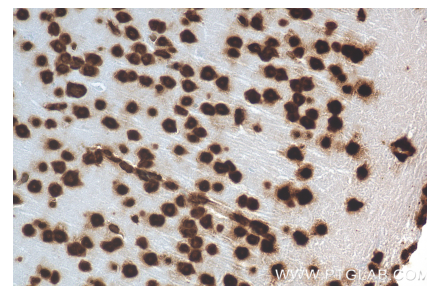
## Selected Validation Data



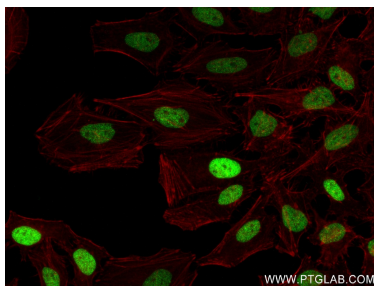
Various lysates were subjected to SDS PAGE followed by western blot with 81984-2-RR (Histone H3 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81984-2-PBS in a different storage buffer formulation.



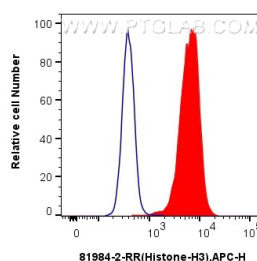
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 81984-2-RR (Histone H3 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81984-2-PBS in a different storage buffer formulation.



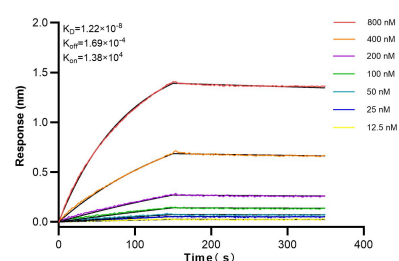
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 81984-2-RR (Histone H3 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81984-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Histone H3 antibody (81984-2-RR, Clone: 241079B2) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81984-2-PBS in a different storage buffer formulation.



$1 \times 10^6$  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. This data was developed using the same antibody clone with 81984-2-PBS in a different storage buffer formulation.



Bi-layer interferometry (BLI) kinetic assays of 81984-2-RR against Human Histone H3 were performed. The affinity constant is 12.2 nM.