For Research Use Only

## Histone H3 Recombinant antibody, PBS Only

Catalog Number:81984-2-PBS



**Purification Method:** 

Protein A purfication

CloneNo.:

241079B2

**Basic Information** 

Catalog Number: GenBank Accession Number: 81984-2-PBS BC015544

Concentration: GeneID (NCBI):

1 mg/ml 333932

Source: UNIPROT ID:

Rabbit Q71DI3

Isotype: Full Name:
IgG histone cluster 2, H3a
Immunogen Catalog Number: Calculated MW:
AG10644 136 aa, 15 kDa

Observed MW: 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

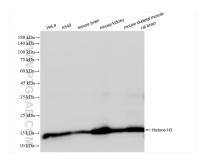
Storage:

Store at -80°C.

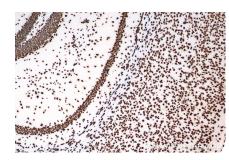
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

PBS only, pH7.3

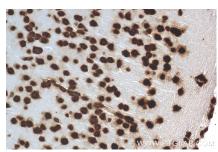
## Selected Validation Data



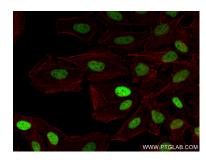
Various lysates were subjected to SDS PAGE followed by western blot with 81984-2-RR (Histone H3 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 81984-2-PBS in a different storage buffer formulation.



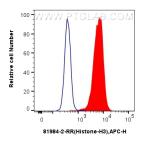
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81984-2-RR (Histone H3 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81984-2-PBS in a different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



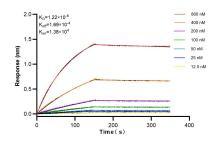
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81984-2-RR (Histone H3 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 81984-2-PBS in a different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



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug Histone H3 Recombinant antibody (81984-2-RR, Clone:241079B2) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug 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



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