For Research Use Only

Histone H3 Recombinant antibody

Isotype:

Catalog Number:81984-2-RR



Basic Information

Catalog Number: GenBank Accession Number:

81984-2-RR BC015544 GeneID (NCBI): Concentration: 1000 μg/ml 333932 **UNIPROT ID:** Source: Rabbit Q71DI3 Full Name:

histone cluster 2, H3a Calculated MW: Immunogen Catalog Number:

AG10644 136 aa, 15 kDa Observed MW: 15-17 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method:

Protein A purfication CloneNo.:

241079B2

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:250-1:1000 IF/ICC 1:200-1:800

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

IHC: mouse brain tissue, IF/ICC : HeLa cells.

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.

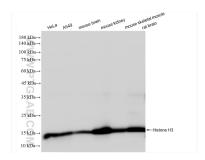
Storage

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

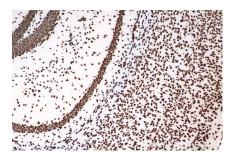
PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

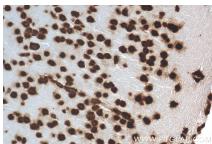
Selected Validation Data



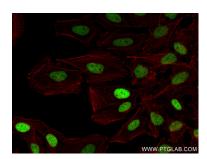
Various lysates were subjected to SDS PAGE followed by western blot with 81984-2-RR (Histone H3 antibody) at dilution of 1:25000 incubated at room temperature for 1.5 hours.



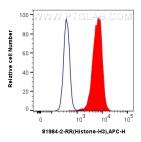
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81984-2-RR (Histone H3 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



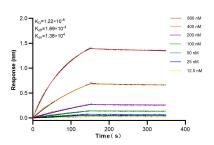
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81984-2-RR (Histone H3 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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.



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