Leader in Biomolecular Solutions for Life Science

Histone H4 Rabbit mAb

Catalog No.: A23000 Recombinant



Basic Information

Observed MW

Calculated MW

11kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ChIP,ChIP-seq,ELISA

Cross-Reactivity

Human, Mouse, Rat, Other (Wide Range Predicted)

CloneNo number

ARC57963

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in a histone cluster on chromosome 1. This gene is one of four histone genes in the cluster that are duplicated; this record represents the centromeric copy.

Recommended Dilutions

WB 1:500 - 1:1000
IHC-P 1:500 - 1:1000
IF/ICC 1:100 - 1:500
ChIP 5μg antibody for 5μg-10μg of Chromatin

1:50 - 1:200

Contact

ChIP-seq

www.abclonal.com

Immunogen Information

Gene ID	Swiss Prot
8359	P62805

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human Histone H4(NP 003529.1)

Synonyms

H4; H4/n; H4C1; H4C2; H4C3; H4C4; H4C5; H4C6; H4C8; H4C9; H4F2; H4FN; F0108; H4-16; H4C11; H4C12; H4C13; H4C15; H4C16; HIST2H4; HIST2H4A; Histone H4

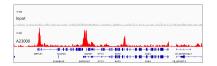
Product Information

SourceIsotypePurificationRabbitIgGAffinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

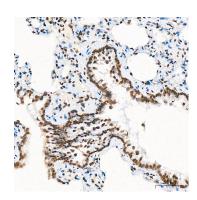
Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.



Chromatin immunoprecipitations were performed with cross-linked chromatin from Hela cells and Histone H4 mAb (A23000). The ChIP sequencing results indicate the enrichment pattern of Histone H4 in selected genomic region and representative gene loci (GAPDH), as shown in figure.

Western blot analysis of various lysates, using Histone H4 Rabbit mAb (A23000) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

70kbysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. 50kDetection: ECL Enhanced Kit (RM00021). 40kbyposure time: 30s.



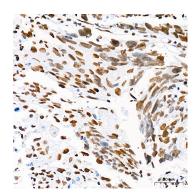
Immunohistochemistry analysis of Histone H4 in paraffin-embedded rat lung tissue using Histone H4 Rabbit mAb (A23000) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



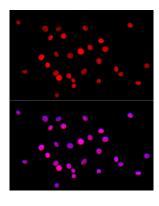
Immunohistochemistry analysis of Histone H4 in paraffin-embedded rat brain tissue using Histone H4 Rabbit mAb (A23000) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



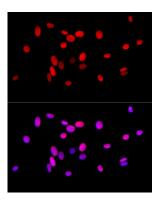
Immunohistochemistry analysis of Histone H4 in paraffin-embedded mouse colon tissue using Histone H4 Rabbit mAb (A23000) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of Histone H4 in paraffin-embedded human cervix



Immunofluorescence analysis of NIH/3T3 cells using Histone H4 Rabbit mAb (A23000)



Immunofluorescence analysis of PC-12 cells using Histone H4 Rabbit mAb (A23000) at

Validation Data

cancer tissue using Histone H4 Rabbit mAb (A23000) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.

at dilution of 1:300 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

dilution of 1:300 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit $\lg G$ (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of cells, using Histone H4 antibody (A23000) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.