# **Histone H3 Rabbit mAb**

Catalog No.: A22348 Recombinant 2 Publications



## **Basic Information**

## **Observed MW**

17kDa

#### **Calculated MW**

15kDa

#### Category

SMab Recombinant Monoclonal Antibody

#### **Applications**

WB,IHC-P,IF/ICC,ELISA,CUT&Tag

#### **Cross-Reactivity**

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

## CloneNo number

ARC50519

## **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 H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3.

## **Recommended Dilutions**

WB 1:4000 - 1:24000 IHC-P 1:200 - 1:2000

**IF/ICC** 1:200 - 1:2000

**ELISA** Recommended starting

concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

CUT&Tag 10<sup>5</sup> cells /1 μg

## **Contact**

www.abclonal.com

## **Immunogen Information**

Gene ID	Swiss Prot
8290/8350	Q16695/P68431

#### **Immunogen**

Synthetic peptide. This information is considered to be commercially sensitive.

### **Synonyms**

H3/A; H3C2; H3C3; H3C4; H3C6; H3C7; H3C8; H3FA; H3C10; H3C11; H3C12; HIST1H3A; Histone H3

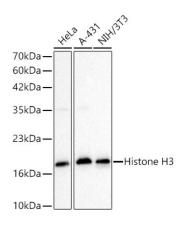
### **Product Information**

SourceIsotypePurificationRabbitIgGAffinity purification

#### Storage

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

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.



Western blot analysis of various lysates using Histone H3 Rabbit mAb (A22348) at 1:4000 dilution.

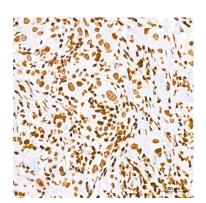
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates / proteins: 25 µg per lane.

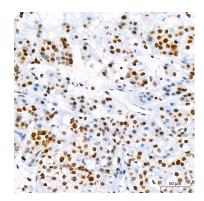
Blocking buffer: 3 % nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

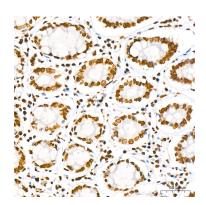
Exposure time: 10s.



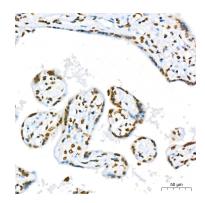
Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



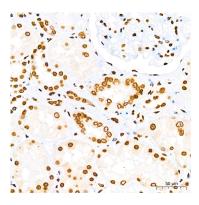
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



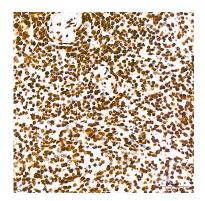
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



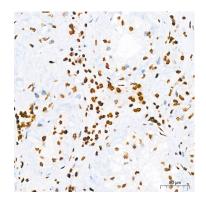
Immunohistochemistry analysis of paraffin-embedded Human placenta tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human kidney tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



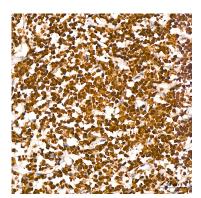
Immunohistochemistry analysis of paraffin-embedded Human spleen tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



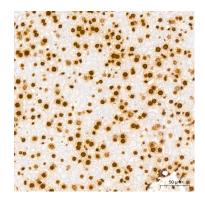
Immunohistochemistry analysis of paraffin-embedded Human testis tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



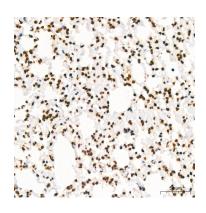
Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



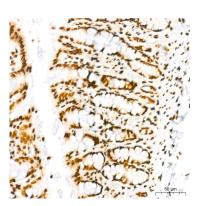
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



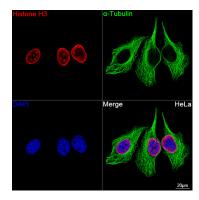
Immunohistochemistry analysis of paraffin-embedded Mouse liver tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



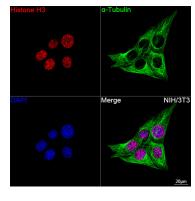
Immunohistochemistry analysis of paraffin-embedded Mouse lung tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



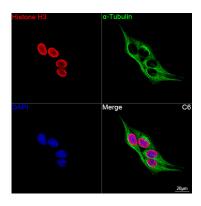
Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using Histone H3 Rabbit mAb (A22348) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Confocal imaging of HeLa cells using Histone H3 Rabbit mAb (A22348, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained



Confocal imaging of NIH/3T3 cells using Histone H3 Rabbit mAb (A22348, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were



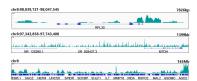
Confocal imaging of C6 cells using Histone H3 Rabbit mAb (A22348, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained

## **Validation Data**

with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10<sup>5</sup> K562 cells with 1 ug Histone H3 Rabbit mAb , along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Histone H3 in representative gene loci (RPL30), as shown in figure.