

## Basic Information

Product Name	Anti-Histone H3 Antibody	
Gene Name	H3C1/H3C2/H3C3/H3C4/H3C6/H3C7/H3C8/H3C10/H3C11/H3C12	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Histone H3 recombinant protein (Position: Q56—R117).	
Purification	Immunogen affinity purified.	
Observed MW	17 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

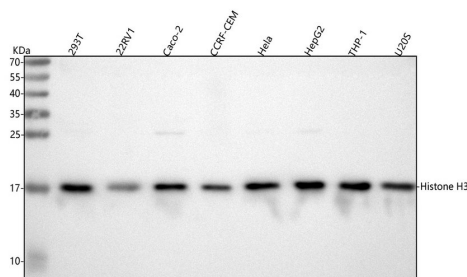
Histone H3.1 is a protein that in humans is encoded by the HIST1H3A gene. Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed 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.

## Reference

Anti-Histone H3 Antibody被引用在21文献中。

## Selected Validation Data



Western blot analysis of Histone H3 using anti-Histone H3 antibody (A12477-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human 22RV1 whole cell lysates,

Lane 3: human Caco-2 whole cell lysates,

Lane 4: human CCRF-CEM whole cell lysates,

Lane 5: human Hela whole cell lysates,

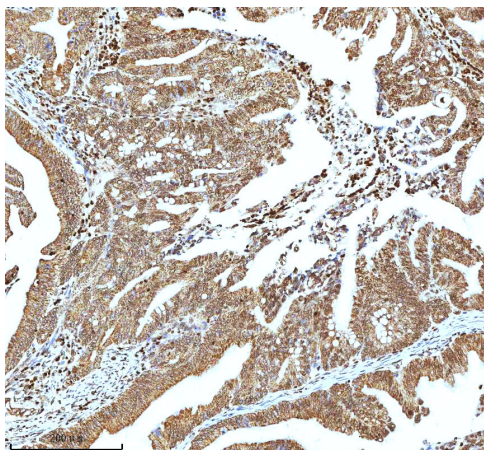
Lane 6: human HepG2 whole cell lysates,

Lane 7: human THP-1 whole cell lysates,

Lane 8: human U2OS whole cell lysates.

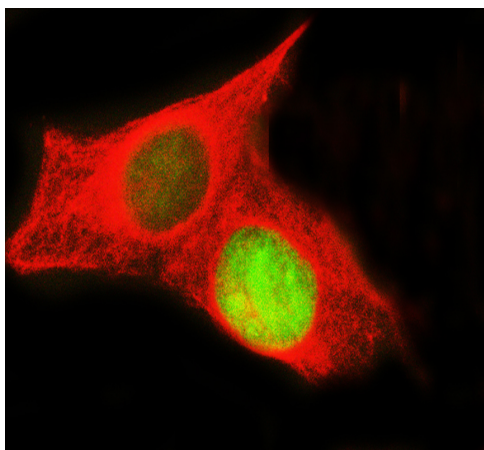
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Histone H3 antigen affinity purified polyclonal antibody (A12477-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Histone H3 at approximately 17 kDa. The expected band size for Histone H3 is at 15 kDa.



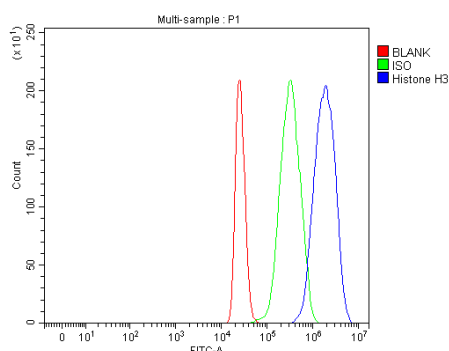
IHC analysis of Histone H3 using anti-Histone H3 antibody (A12477-2).

Histone H3 was detected in a paraffin-embedded section of human colon adenocarcinoma tissue. The tissue section was incubated with rabbit anti-Histone H3 Antibody (A12477-2) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of Histone H3 using anti-Histone H3 antibody (A12477-2) and anti-Beta Tubulin antibody (M01857-3).

Histone H3 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-Histone H3 Antibody (A12477-2) at a dilution of 1:100. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and Cy3-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1031) were used as secondary antibody.



Flow Cytometry analysis of C6 cells using anti-Histone H3 antibody (A12477-2).

Overlay histogram showing C6 cells stained with A12477-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Histone H3 Antibody (A12477-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.