

Basic Information

Product Name	Anti-Histone H3 Antibody	
Gene Name	H3C1/H3C2/H3C3/H3C4/H3C6/H3C7/H3C8/H3C10/H3C11/H3C12	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human,mouse,rat	
Tested Application	WB,IHC,IF,ICC/IF	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human Histone H3 recombinant protein (Position: Q56—R117).	
Purification	Immunogen affinity purified.	
Observed MW	17KD	
Dilution Ratios	Western blot (WB): Immunohistochemistry in paraffin section IHC: Immunofluorescence (IF): Immunocytochemistry/Immunofluorescence (ICC/IF): ELISA: (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.	1:500-2000 1:50-400 1:50-400 1:50-400 1:100-1000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

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.

Selected Validation Data

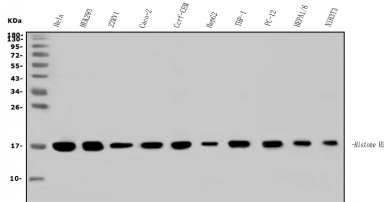


Figure 1. Western blot analysis of Histone H3 using anti-Histone H3 antibody (A12477-2).

The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human HELA whole cell lysates, Lane 2: human HEK293 whole cell lysates, Lane 3: human 22RV1 whole cell lysates, Lane 4: human CACO-2 whole cell lysates, Lane 5: human CCRF-CEM whole cell lysates, Lane 6: human HEPG2 whole cell lysates, Lane 7: human THP-1 whole cell lysates, Lane 8: rat PC-12 whole cell lysates, Lane 9: mouse HEPA1/6 whole cell lysates, Lane 10: mouse NIH/3T3 whole cell lysates.

anti-Histone H3 antigen affinity purified polyclonal antibody (Catalog # A12477-2) probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for Histone H3 at approximately 17KD. The expected band size for Histone H3 is at 15KD.

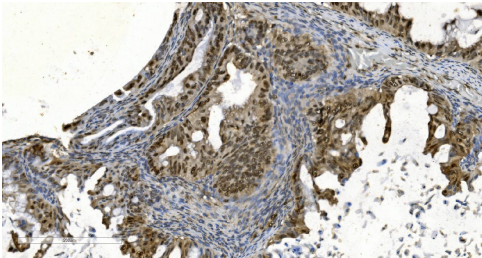


Figure 2. IHC analysis of Histone H3 using anti-Histone H3 antibody (A12477-2). Histone H3 was detected in paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-Histone H3 Antibody (A12477-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

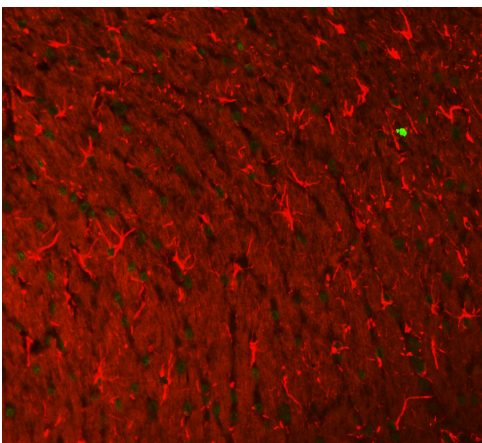


Figure 10. IF analysis of Histone H3 and GFAP using anti-Histone H3 antibody (A12477-2) and anti-GFAP antibody (M00213-8). Histone H3 and GFAP was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5 µg/mL rabbit anti-Histone H3 antibody (A12477-2) and mouse anti-GFAP antibody (M00213-8) overnight at 4°C. DyLight[®]488 Conjugated Goat Anti-Rabbit IgG (BA1127), Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C.

Product datasheet

Anti-Histone H3 Antibody

Catalog Number: **A12477-2**

BOSTER

antibody and ELISA experts

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The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

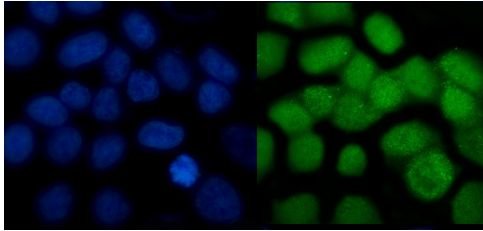


Figure 9. ICC analysis using anti- Histone H3 antibody (A12477-2). was detected in immersion fixed MCF-7 cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).