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Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody

Catalog # ABO14320

Specification

Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC**
Primary Accession	P68431
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody - Additional Information

Gene ID 8350;8351;8352;8353;8354;8355;8356;8357;8358;8968

Other Names
Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/i, Histone H3/j, Histone H3/k, Histone H3/l, H3C1 (HGNC:4766), H3FA, HIST1H3A

Calculated MW
15404 MW KDa

Application Details
WB 1:500-1:2000
IHC 1:500-1:2000
ICC/IF 1:100-1:500

Subcellular Localization
Nucleus. Chromosome.

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human Histone H3 (mono methyl K18)

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

up to one month. Avoid repeated freeze-thaw cycles.

Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody - Protein Information

Name H3C1 (HGNC:4766)

Synonyms H3FA, HIST1H3A

Function
Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require 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.

Cellular Location
Nucleus. Chromosome.

Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Histone H3 (mono methyl K18) HIST1H3A Rabbit Monoclonal Antibody - Images

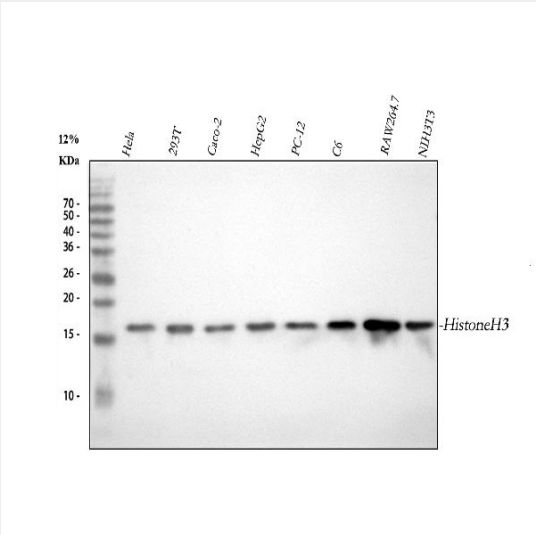

Figure 1. Western blot analysis of Histone H3 (mono methyl K18) using anti-Histone H3 (mono

methyl K18) antibody (M12477-6).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human 293T whole cell lysates,
Lane 3: human CACO-2 whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: human PC-12 whole cell lysates,
Lane 6: rat C6 whole cell lysates,
Lane 7: mouse RAW264.7 whole cell lysates,
Lane 8: mouse NIH/3T3 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Histone H3 (mono methyl K18) antigen affinity purified monoclonal antibody (Catalog # M12477-6) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Histone H3 (mono methyl K18) at approximately 17 kDa. The expected band size for Histone H3 (mono methyl K18) is at 15 kDa.

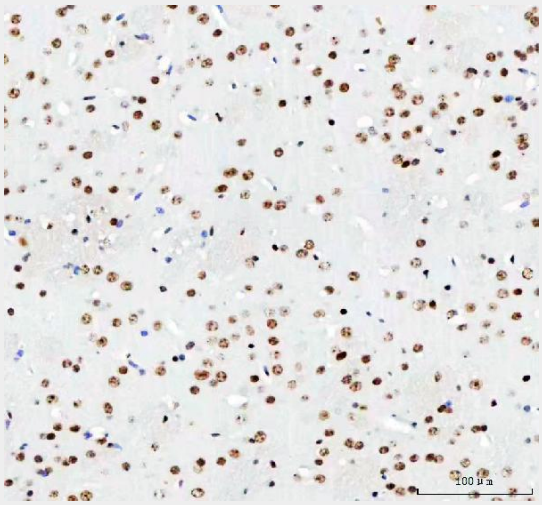

Figure 2. IHC analysis of Histone H3 (mono methyl K18) using anti-Histone H3 (mono methyl K18) antibody (M12477-6).
Histone H3 (mono methyl K18) was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:500 rabbit anti-Histone H3 (mono methyl K18) Antibody (M12477-6) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

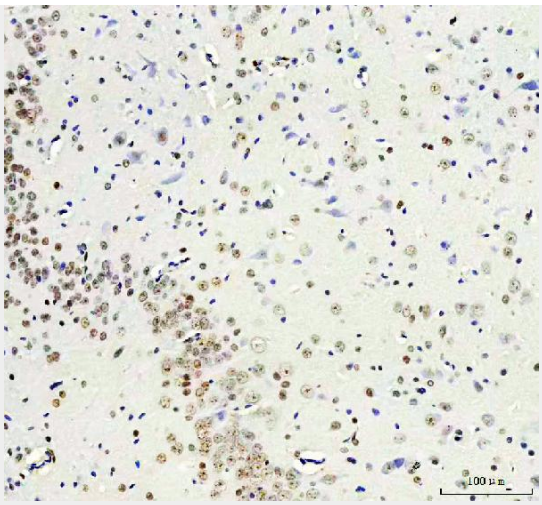

Figure 3. IHC analysis of Histone H3 (mono methyl K18) using anti-Histone H3 (mono methyl K18) antibody (M12477-6).
Histone H3 (mono methyl K18) was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:500 rabbit anti-Histone H3 (mono methyl K18) Antibody (M12477-6) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

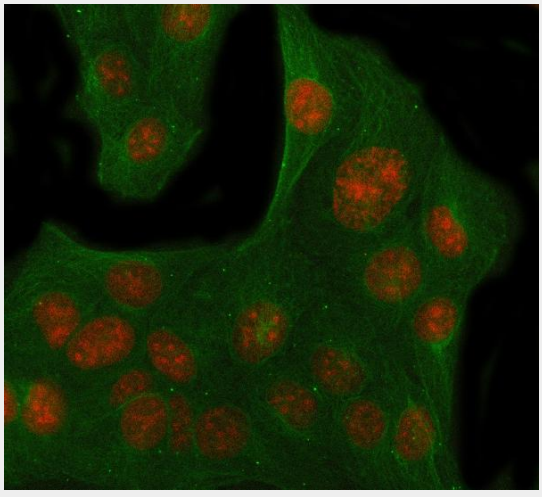

Figure 4. IF analysis of Histone H3 (mono methyl K18) using anti-Histone H3 (mono methyl K18) antibody (M12477-6) and anti-Beta Tubulin antibody (M01857-3).
Histone H3 (mono methyl K18) was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated at 1:100 with rabbit anti-Histone H3 (mono methyl K18) Antibody (M12477-6) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) and DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.