

Basic Information

Product Name	Anti-Histone H3 (mono methyl K18) Antibody (Clone#DFC-8)	
Gene Name	H3C1/H3C2/H3C3/H3C4/H3C6/H3C7/H3C8/H3C10/H3C11/H3C12	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human Histone H3 (mono methyl K18)	
Purification	Affinity-chromatography	
Observed MW	15-17 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-200 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-200	

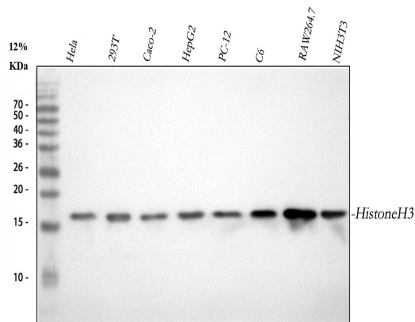
Storage

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

Background Information

Histones are the main constituents of the protein part of chromosomes of eukaryotic cells. They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histone tails undergo numerous post-translational modifications, which either directly or indirectly alter chromatin structure to facilitate transcriptional activation or repression or other nuclear processes. In addition to the genetic code, combinations of the different histone modifications reveal the so-called "histone code". Histone methylation and demethylation is dynamically regulated by respectively histone methyl transferases and histone demethylases.

Selected Validation Data



Western blot analysis of anti-Histone H3 (mono methyl K18) antibody (BM4323). 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,

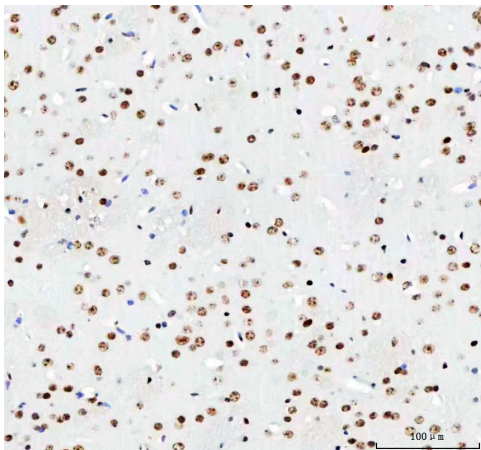
Lane 6: rat C6 whole cell lysates,

Lane 7: mouse RAW264.7 whole cell lysates,

Lane 8: mouse NIH/3T3 whole cell lysates.

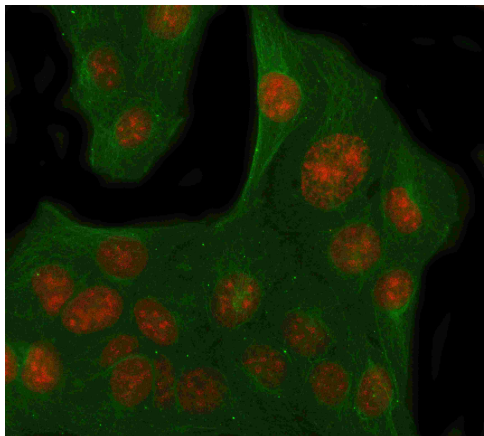
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Histone H3 (mono methyl K18) antigen affinity purified monoclonal antibody (BM4323) 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 (mono methyl K18) at approximately 17 kDa. The expected band size for Histone H3 (mono methyl K18) is at 15 kDa.



IHC analysis of Histone H3 (mono methyl K18) using anti-Histone H3 (mono methyl K18) antibody (BM4323).

Histone H3 (mono methyl K18) was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was 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 (mono methyl K18) using anti-Histone H3 (mono methyl K18) antibody (BM4323) and anti-Beta Tubulin antibody (M01857-3).

Histone H3 (mono methyl K18) was detected in an immunocytochemical section of U2OS cells. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.