

## Basic Information

<b>Product Name</b>	Anti-Methyl-Histone H3 (di K4) Antibody (Clone#AFF-8)	
<b>Gene Name</b>	H3C1/H3C2/H3C3/H3C4/H3C6/H3C7/H3C8/H3C10/H3C11/H3C12	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF, IP, FCM	
<b>Contents</b>	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.	
<b>Immunogen</b>	A synthesized peptide derived from human Methyl-Histone H3 (di K4)	
<b>Purification</b>	Affinity-chromatography	
<b>Observed MW</b>	15-17 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:1000-5000
	Immunohistochemistry (IHC):	1:50-200
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-200
	ImmunoPrecipitation (IP):	1:50
	Flow Cytometry (FCM):	1:50

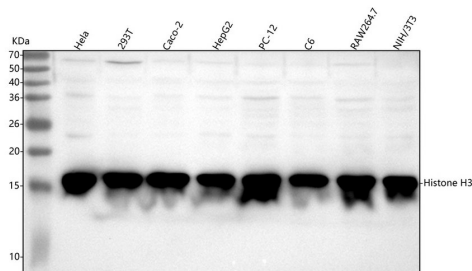
## Storage

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-Methyl-Histone H3 (di K4) antibody (BM4019). 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: rat 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-Methyl-Histone H3 (di K4) antigen affinity purified monoclonal antibody (BM4019) 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 Methyl-Histone H3 (di K4) at approximately 15 kDa. The expected band size for Methyl-Histone H3 (di K4) is at 15 kDa.