

MonoMethyl-Histone H3-K4 pAb

Catalog No.	A2355	Category	Methylated Antibodies
Applications	WB, IHC, IF, IP, ChIP, ChIPseq	Observed MW	18kDa
Cross-reactivity	Human, Mouse, Rat, Other (Wide Range)	Calculated MW	15kDa

Immunogen Information

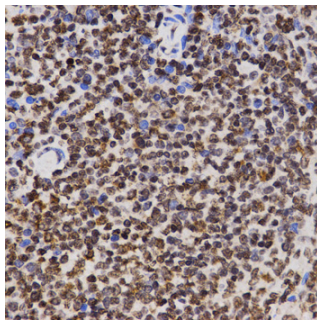
Immunogen	A synthetic methylated peptide corresponding to residues surrounding K4 of human histone H3
Gene ID	8290
Swiss prot	Q16695
Synonyms	H3.4;H3/g;H3FT;H3t

Product information

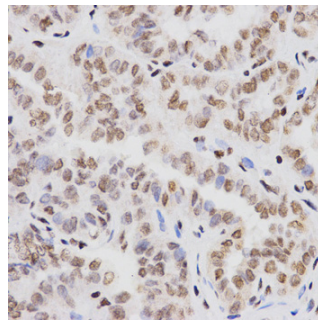
Source	Rabbit
Isotype	IgG
Purification method	Affinity purification
Storage	Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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 located separately from the other H3 genes that are in the histone gene cluster on chromosome 6p22-p21.3.



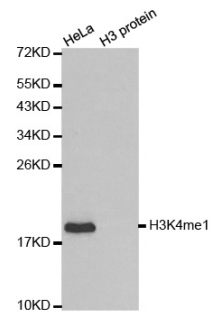
Immunohistochemistry of paraffin-embedded rat spleen using MonoMethyl-Histone H3-K4 antibody (A2355) at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded human thyroid cancer using MonoMethyl-Histone H3-K4 antibody (A2355) at dilution of 1:200 (40x lens).

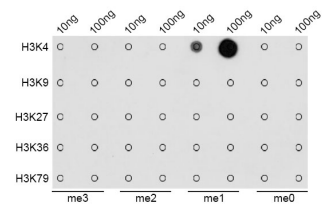
Recommended Dilutions

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF	1:50 - 1:200
IP	1:50 - 1:200
ChIP	1:20 - 1:100
ChIPseq	1:20 - 1:100

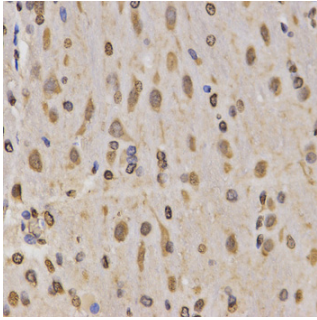


Western blot analysis of extracts of various cell lines, using MonoMethyl-Histone H3-K4 antibody (A2355). Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

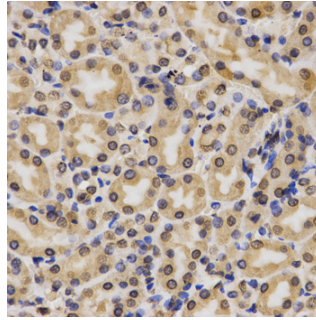
Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST.



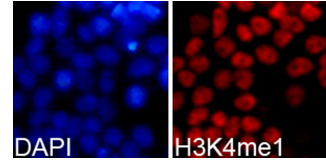
Dot-blot analysis of all sorts of methylation peptides using MonoMethyl-Histone H3-K4 antibody (A2355).



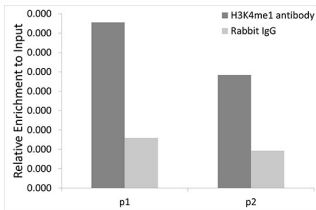
Immunohistochemistry of paraffin-embedded rat brain using MonoMethyl-Histone H3-K4 antibody (A2355) at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded rat kidney using MonoMethyl-Histone H3-K4 antibody (A2355) at dilution of 1:200 (40x lens).



Immunofluorescence analysis of 293T cells using MonoMethyl-Histone H3-K4 antibody (A2355). Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis extracts of 293T cells, using MonoMethyl-Histone H3-K4 antibody (A2355) and rabbit IgG. P1 and P2 were located on promoter (GAPDH). The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.