

Rabbit H3K4me1 Antibody | anti-H3K4me1 antibody

Histone H3K4me1 Polyclonal Antibody

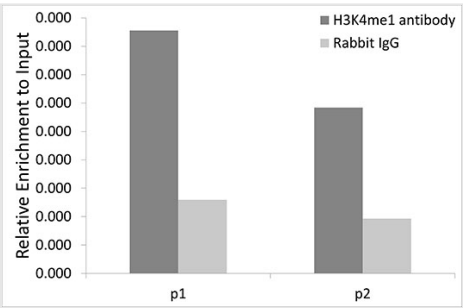
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA10653	Rabbit	Human, Mouse, Rat, Other (Wide Range)	Western Blot, Immunohistochemistry, Immunofluorescence, Immunoprecipitation, Chromatin Immunoprecipitation, Immunoprecipitation, Chromatin Immunoprecipitation, Immunoprecipitation

PRODUCT SYNONYMS

H3K4me1; Histone H3K4me1 Polyclonal Antibody; MonoMethyl-Histone H3-K4: HIST1H3J; H3/j; H3FJ; 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; HIST3H3; anti-H3K4me1 antibody

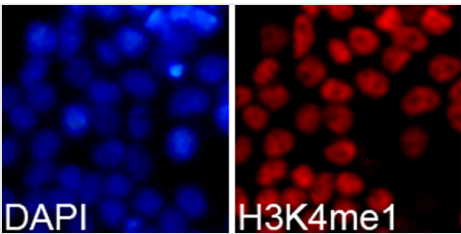
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Other (Wide Range)
Isotype	IgG
Purity/Purification	Affinity Purification
Concentration	1mg/ml (varies by lot)
Sequence Length	136
Applicable Applications for anti-H3K4me1 antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), IP (Immunoprecipitation), ChIP (Chromatin Immunoprecipitation), ChIP (Chromatin Immunoprecipitation)
Application Notes	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
Species	Human
Route	Synthetic Peptide
Immunogen	A synthetic methylated peptide corresponding to residues surrounding K4 of human histone H3
Calculated Molecular Weight	15kDa
Preparation and Storage	Store at -20 degree C (regular) or -80 degree C (long term). Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.



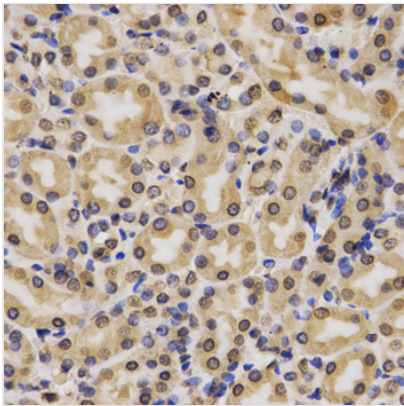
ChIP (Chromatin Immunoprecipitation)

Chromatin immunoprecipitation analysis extracts of 293T cells, using MonoMethyl-Histone H3-K4 antibody 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.



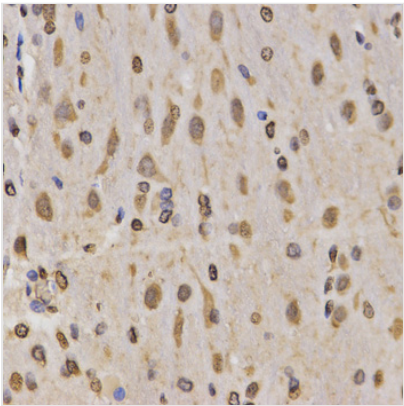
IF (Immunofluorescence)

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



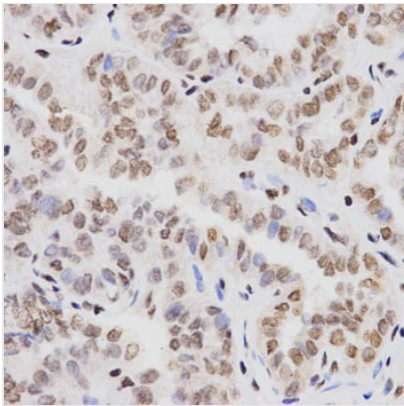
IHC (Immunohistochemistry)

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



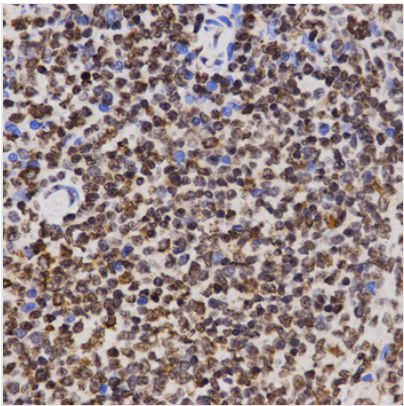
IHC (Immunohistochemistry)

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



IHC (Immunohistochemistry)

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



IHC (Immunohistochemistry)

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

ADDITIONAL INFORMATION

Related Product Information for anti-H3K4me1 antibody	Modulation of chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of DNA wound around eight core histone proteins (two each of H2A, H2B, H3, and H4), is the primary building block of chromatin (1). The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination (2-5). These modifications occur in response to various stimuli and have a direct effect on the accessibility of chromatin to transcription factors and, therefore, gene expression (6). In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20 (4,7). Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms (2,3). Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis (8-10). Phosphorylation at Thr3 of histone H3 is highly conserved among many species and is catalyzed by the kinase haspin. Immunostaining with phospho-specific antibodies in mammalian cells reveals mitotic phosphorylation at Thr3 of H3 in prophase and its dephosphorylation during anaphase (11).
Product Categories/Family for anti-H3K4me1 antibody	Methylation

NCBI AND UNIPROT INFORMATION

NCBI GI #	18202512
NCBI GeneID	8290
UniProt Accession #	Q16695; Q6FGU4; B2R5K3
Molecular Weight	136
NCBI Official Full Name	Histone H3.1t
NCBI Official Synonym Full Names	histone cluster 3, H3
NCBI Official Symbol	HIST3H3
NCBI Official Synonym Symbols	H3t; H3.4; H3/g; H3FT
NCBI Protein Information	histone H3.1t; H3/t; histone 3, H3; H3 histone family, member T
UniProt Protein Name	Histone H3.1t
UniProt Gene Name	HIST3H3
UniProt Synonym Gene Names	H3FT; H3/t; H3t
UniProt Entry Name	H31T_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.