

Rabbit Anti-Histone H2B (Acetyl K20) antibody

SL3783R

Product Name:	Histone H2B (Acetyl K20)
Chinese Name:	乙酰化组蛋白H2B抗体
Alias:	Acetyl-Histone H2B (Lys20); Histone H2B (Acetyl-Lys20); Histone H2B (Acetyl-Lys20); Histone H2B (Acetyl-K20); H2B.1; H2B.1 B; H2B.b; H2B.c; H2B.d; H2B.e; H2B.f; H2B.g; H2B.g; H2BFB; H2BFC; H2BFD; H2BFE; H2BFF; H2BFJ; H2BFO; H2BFQ; H2BFS; HIRIP2; HIST1H2BB; HIST1H2BD; HIST1H2BH; HIST1H2BL; HIST1H2BM; HIST1H2BN; HIST2H2BE; Histone H2B; Histone H2B type 1 B; Histone H2B type 1 D; Histone H2B type 1 H; Histone H2B type 1 L; Histone H2B type 1 M; Histone H2B type 1 N; Histone H2B type 2 E; Histone protein; H2B GL105; H2B histone family member O; H2B histone family member S; H2B1B_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	14kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated Synthesised acetylpeptide derived from human Histone H2B around the acetylation site of Lys20:IT(Ac-K)AQ
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

PubMed

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 member of the histone H2B family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Jul 2008].

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.

Subunit:

The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA.

Product Detail:

Subcellular Location:

Nucleus. Chromosome.

Post-translational modifications:

Monoubiquitination of Lys-121 by the RNF20/40 complex gives a specific tag for epigenetic transcriptional activation and is also prerequisite for histone H3 'Lys-4' and 'Lys-79' methylation. It also functions cooperatively with the FACT dimer to stimulate elongation by RNA polymerase II. [PTM] Phosphorylation at Ser-37 (H2BS36ph) by AMPK in response to stress promotes transcription (By similarity). Phosphorylated on Ser-15 (H2BS14ph) by STK4/MST1 during apoptosis; which facilitates apoptotic chromatin condensation. Also phosphorylated on Ser-15 in response to DNA double strand breaks (DSBs), and in correlation with somatic hypermutation and immunoglobulin class-switch recombination.

GlcNAcylation at Ser-113 promotes monoubiquitination of Lys-121. It fluctuates in response to extracellular glucose, and associates with transcribed genes (By similarity). Crotonylation (Kcr) is specifically present in male germ cells and marks testis-specific genes in post-meiotic cells, including X-linked genes that escape sex chromosome inactivation in haploid cells. Crotonylation marks active promoters and enhancers and confers resistance to transcriptional repressors. It is also associated with post-meiotically activated genes on autosomes.

Similarity:

Belongs to the histone H2B family.

SWISS:

P33778

Gene ID:

3018

Database links:

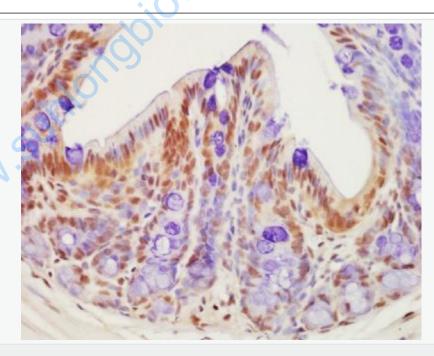
Entrez Gene: 3018 Human

Omim: 602803 Human

SwissProt: P33778 Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

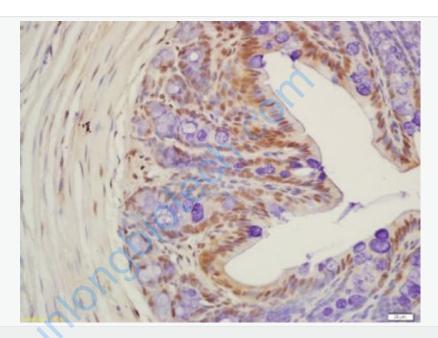


Picture:

Tissue/cell: rat colon tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer

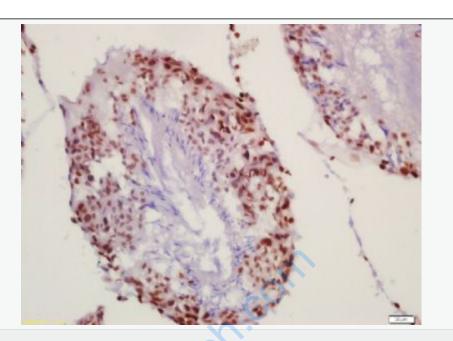
(normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Histone H2B (Acetyl K20) Polyclonal Antibody,
Unconjugated(SL3783R) 1:200, overnight at 4°C, followed by conjugation to the
secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat colon tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-Histone H2B Polyclonal Antibody, Unconjugated(SL3783R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Histone H2B (Acetyl K20) Polyclonal Antibody,

Unconjugated(SL3783R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining