

# Ubiquityl-Histone H2B (Lys120) Recombinant Mouse mAb

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Catalog # AP94554

## Product Information

<b>Application</b>	WB, IHC-P, IHC-F, IF
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Mouse
<b>Clonality</b>	Recombinant
<b>Physical State</b>	Liquid
<b>Isotype</b>	IgG2a, Kappa
<b>Purity</b>	Antigen affinity purification
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Nucleus. Chromosome.
<b>SIMILARITY</b>	Belongs to the histone H2B family.
<b>SUBUNIT</b>	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.
<b>Post-translational modifications</b>	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.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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].

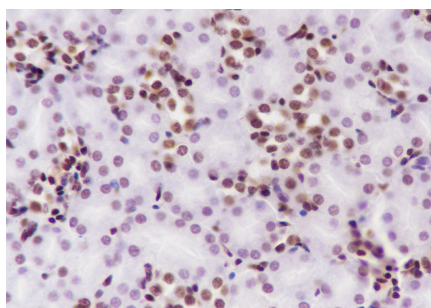
## Additional Information

<b>Dilution</b>	WB=1:200-1000,IHC-P=1:20-100,IHC-F=1:20-100,IF=1:20-100
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

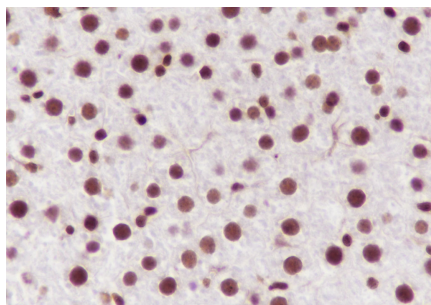
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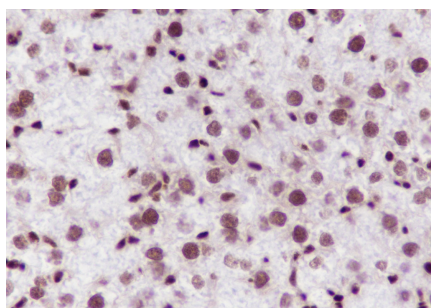
## Images



Tissue: Mouse kidney Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94554

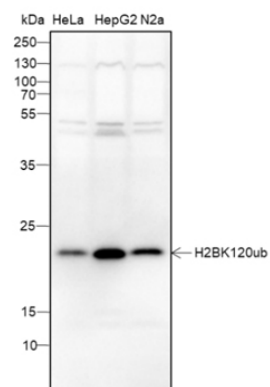


Tissue: Rat liver Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94554



Tissue: Human liver Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94554

Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:1000 Primary ab incubation condition: 4°C overnight Secondary ab: Goat Anti-Mouse IgG H&L (HRP) Lysate: HeLa, HepG2, Neuro-2a Protein loading quantity: 20 µg Exposure time: 30 s Predicted MW: 23 kDa Observed MW: 23 kDa



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.