

## ARG41372 anti-Histone H2B acetyl (Lys20) antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes Histone H2B acetyl (Lys20)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ChIP, FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Histone H2B
Species	Human
Immunogen	Synthetic peptide around acetyl Lys20 of Human Histone H2B.
Conjugation	Un-conjugated
Alternate Names	Histone H2B.f; Histone H2B type 1-B; Histone H2B.1; H2B/f; H2BFF; H2B.1

### Application Instructions

Application table	Application	Dilution
	ChIP	Assay-dependent
	FACS	1:10
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:10
	WB	1:5000 - 1:20000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 14 kDa	

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

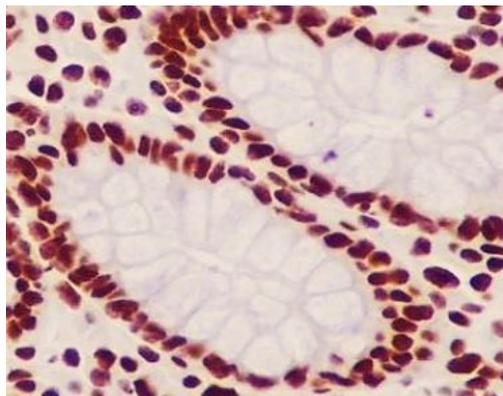
**Note**

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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<b>Gene Symbol</b>	HIST1H2BB
<b>Gene Full Name</b>	histone cluster 1, H2bb
<b>Background</b>	<p>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 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, Aug 2015]</p>
<b>Function</b>	<p>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. [UniProt]</p>
<b>Calculated Mw</b>	14 kDa
<b>PTM</b>	<p>Monoubiquitination at Lys-35 (H2BK34Ub) by the MSL1/MSL2 dimer is required for histone H3 'Lys-4' (H3K4me) and 'Lys-79' (H3K79me) methylation and transcription activation at specific gene loci, such as HOXA9 and MEIS1 loci. Similarly, monoubiquitination at Lys-121 (H2BK120Ub) 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. H2BK120Ub also acts as a regulator of mRNA splicing: deubiquitination by USP49 is required for efficient cotranscriptional splicing of a large set of exons.</p> <p>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.</p> <p>GlcNAcylation at Ser-113 promotes monoubiquitination of Lys-121. It fluctuates in response to extracellular glucose, and associates with transcribed genes (By similarity).</p> <p>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. [UniProt]</p>
<b>Cellular Localization</b>	Nucleus. Chromosome. [UniProt]



ARG41372 anti-Histone H2B acetyl (Lys20) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon tissue stained with ARG41372 anti-Histone H2B acetyl (Lys20) antibody.

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ARG41372 anti-Histone H2B acetyl (Lys20) antibody WB image

Western blot: HeLa cells treated with TSA. Cell lysates were stained with ARG41372 anti-Histone H2B acetyl (Lys20) antibody.

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