

**DATASHEET**

**Histone H2B (Butyryl-K5) Rabbit Polyclonal Antibody**

CAT. NO. APA11465

**KEY FEATURES**

Target	Histone H2B (Butyryl-K5)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Chicken, Zebrafish	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

**BACKGROUND**

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.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to Histone H2B (Butyryl-K5)
Specificity	Recognizes endogenous levels of Histone H2B protein only when butylated at K5.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic butylated peptide corresponding to residues surrounding K5 of human Histone H2B protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 13 kD; Observed: 14 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	HIST1H2BA; TSH2B; Histone H2B type 1-A; Histone H2B testis; Testis-specific histone H2B; HIST1H2BB; H2BFF; Histone H2B type 1-B; Histone H2B.1; Histone H2B.f; H2B/f; HIST1H2BC; H2BFL; HIST1H2BE; H2BFH; HIST1H2BF; H2BFG; HIST1H2BG; H2BFA; HIST1H2BI; H2BFK; Histone H2B type 1-C/E/F/G/I; Histone H2B.1 A; Histone H2B.a; H2B/a; Histone H2B.g; H2B/g; Histone H2B.h; H2B/h; Histone H2B.k; H2B/k; Histone H2B.l; H2B/l
Gene Symbol	HIST1H2BC
Entrez Gene	255626; 3018; 3017; 8339; 8343; 8344; 8346; 8347(Human); 319177; 319178; 319179(Mouse); 24829(Rat)
SwissProt	P33778; P62807(Human); P70696; Q64475; Q6ZWY9(Mouse); Q00729(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

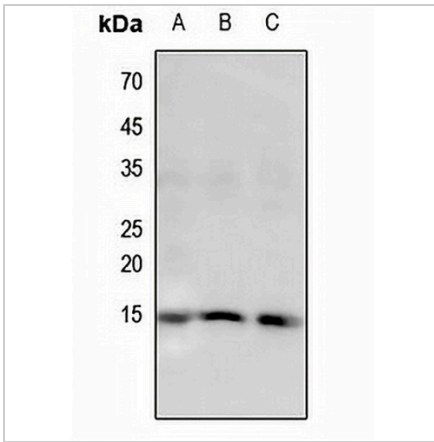
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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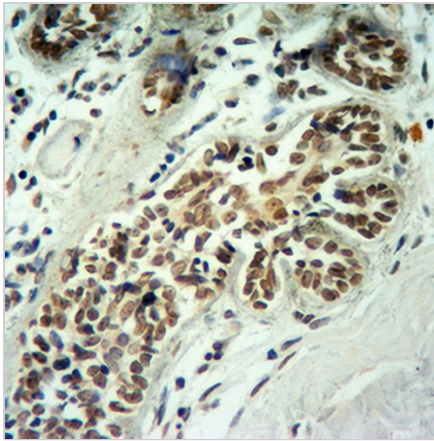
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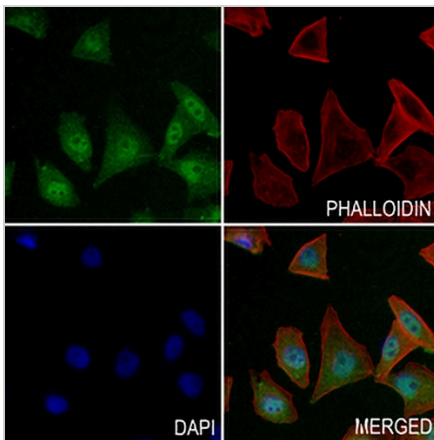
**DATA**



Western blot analysis of Histone H2B (Butyryl-K5) expression in HEK293T (A), U2OS (B), DLD (C) whole cell lysates. (Predicted band size: 13 kD; Observed band size: 14 kD)



Immunohistochemical analysis of Histone H2B (Butyryl-K5) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



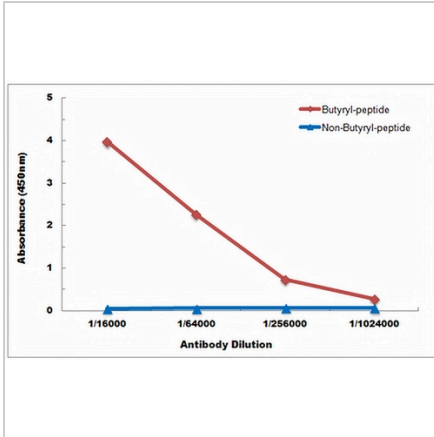
Immunofluorescent analysis of Histone H2B (Butyryl-K5) staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 - conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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**DATA (CONTINUED)**



Direct ELISA antibody dose-response curve using Anti-Histone H2B (Butyryl-K5) Antibody. Antigen (butyryl-peptide and non-butyryl-peptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.