

DATASHEET

Histone H3 (Lactyl-K18) Rabbit Monoclonal Antibody(C774)

CAT. NO. AMA00386

KEY FEATURES

Target	Histone H3 (Lactyl-K18)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.05% BSA 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	1:1000 - 1:2000
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	Recombinant rabbit monoclonal antibody to Histone H3 (Lactyl-K18)
Specificity	Recognizes endogenous levels of Histone H3 protein only when lactylated at K18
Antibody Type	Primary antibody, Recombinant
Immunogen	KLH-conjugated synthetic lactylated peptide corresponding to residues surrounding K18 of human Histone H3 protein. The exact sequence is proprietary.
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 15 kD; Observed: 17 kD
Form/Buffer	Liquid in PBS, pH 7.4, containing 50% glycerol, 0.05% BSA and 0.01% sodium azide.
Alternative Names	HIST1H3A; H3FA; HIST1H3B; H3FL; HIST1H3C; H3FC; HIST1H3D; H3FB; HIST1H3E; H3FD; HIST1H3F; H3FI; HIST1H3G; H3FH; HIST1H3H; H3FK; HIST1H3I; H3FF; HIST1H3J; 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; HIST2H3A; HIST2H3C; H3F2; H3FM; HIST2H3D; Histone H3.2; Histone H3/m; Histone H3/o; H3F3A; H3.3A; H3F3; PP781; H3F3B; H3.3B; Histone H3.3
Gene Symbol	HIST1H3A; HIST1H3B; HIST1H3C; HIST1H3D; HIST1H3E; HIST1H3F; HIST1H3G; HIST1H3H; HIST1H3I; HIST1H3J; HIST2H3A; HIST2H3C; HIST2H3D; H3F3A; H3F3B
Entrez Gene	8350; 8351; 8352; 8353; 8354; 8355; 8356; 8357; 8358; 8968; 126961; 333932; 653604; 3020; 3021(Human); 319152; 15077; 15078(Mouse); 291159; 100361558(Rat)
SwissProt	P68431; Q71DI3; P84243(Human); P68433; P84228; P84244(Mouse); Q6LED0; P84245(Rat)

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

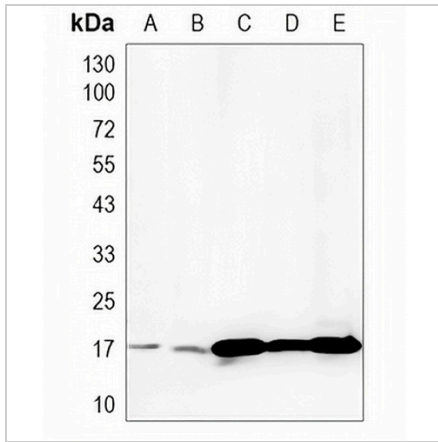
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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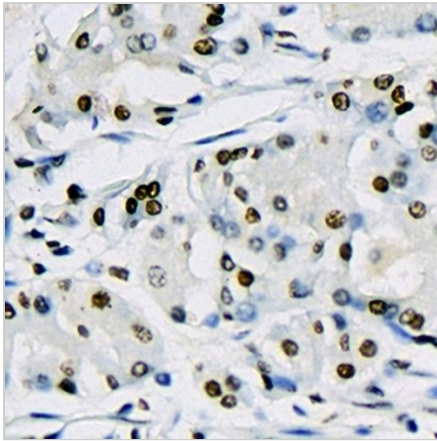
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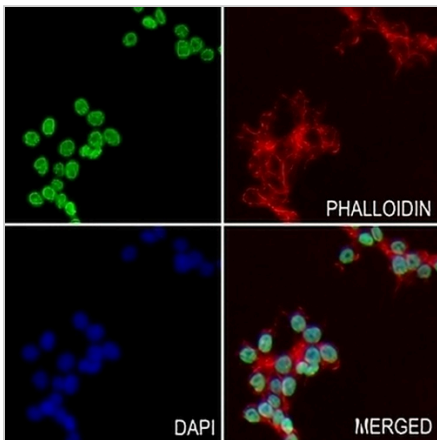
DATA



Western blot analysis of Histone H3 (Lactyl-K18) expression in Jurkat (A), mouse liver (B), mouse muscle (C), rat liver (D), rat muscle (E) whole cell lysates. (Predicted band size: 15 kD; Observed band size: 17 kD)



Immunohistochemical analysis of Histone H3 (Lactyl-K18) staining in human stomach 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.



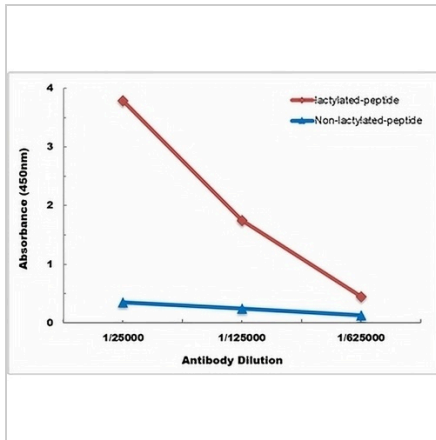
Immunofluorescent analysis of Histone H3 (Lactyl-K18) staining in 22RV1 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an 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 Recombinant Anti-Histone H3 (Lactyl-K18) Rabbit mAb. Antigen (lactylated peptide and non-lactylated-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.