

DATASHEET

Histone H4 (MonoMethyl-K5) Rabbit Polyclonal Antibody

CAT. NO. APA11482

KEY FEATURES

| | | | |
|---------------|---|---------------|--------------|
| Target | Histone H4 (MonoMethyl-K5) | Source / Host | Rabbit |
| Reactivity | Human, Mouse, Rat, Bovine, Chicken, Pig | 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 H4 (MonoMethyl-K5) |
| Specificity | Recognizes endogenous levels of Histone H4 protein only when Mono-methylated at K5. |
| Antibody Type | Primary antibody |
| Immunogen | KLH-conjugated synthetic Mono-methylated peptide corresponding to residues surrounding K5 of human Histone H4 protein. The exact sequence is proprietary. |
| Purification | The antibody was purified by immunogen affinity chromatography. |
| Molecular Weight | Predicted: 11 kD; Observed: 17 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 | H4/A; H4FA; H4/I; H4FI; H4/G; H4FG; H4/B; H4FB; H4/J; H4FJ; H4/C; H4FC; H4/H; H4FH; H4/M; H4FM; H4/E; H4FE; H4/D; H4FD; H4/K; H4FK; H4/N; H4F2; H4FN; HIST2H4; H4/O; H4FO; Histone H4 |
| Gene Symbol | HIST1H4A; HIST1H4B; HIST1H4C; HIST1H4D; HIST1H4E; HIST1H4F; HIST1H4H; HIST1H4I; HIST1H4J; HIST1H4K; HIST1H4L; HIST2H4A; HIST2H4B; HIST4H4 |
| Entrez Gene | 121504; 554313; 8294; 8359; 8360; 8361; 8362; 8363; 8364; 8365; 8366; 8367; 8368; 8370(Human); 100041230; 102641229; 319155; 319156; 319157; 319158; 319159; 319160; 319161; 320332; 326619; 326620; 69386; 97122(Mouse); 100360950; 100912290; 100912418; 100912564; 102548682; 102551184; 102557184; 291152; 295277; 500351; 502913; 64627; 680097(Rat) |
| SwissProt | P62805(Human); P62806(Mouse); P62804(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.

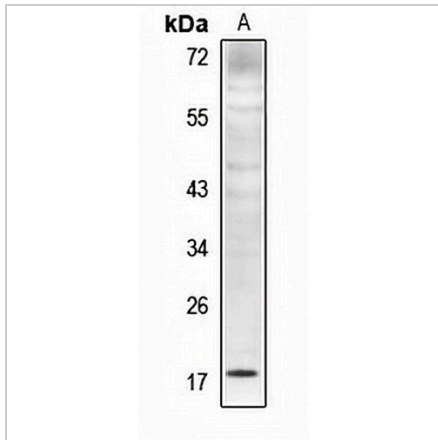
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

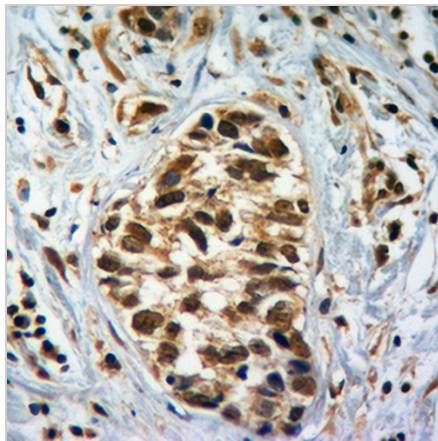
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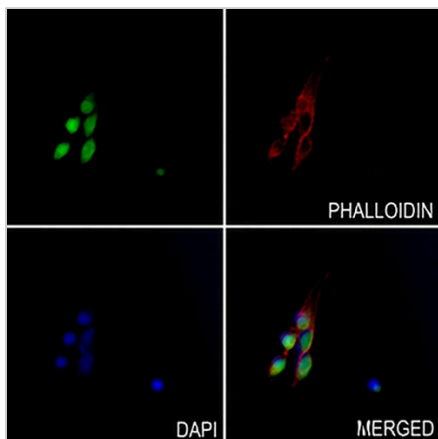
DATA



Western blot analysis of Histone H4 (MonoMethyl-K5) expression in HeLa (A) whole cell lysates. (Predicted band size: 11 kD; Observed band size: 17 kD)



Immunohistochemical analysis of Histone H4 (MonoMethyl-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.



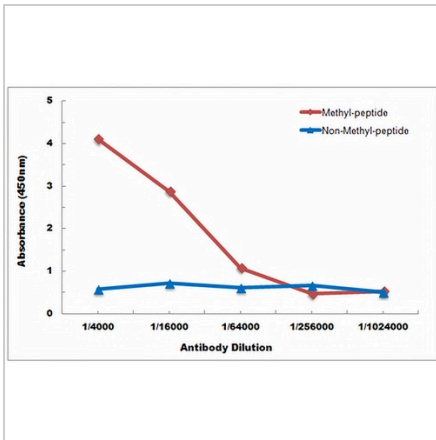
Immunofluorescent analysis of Histone H4 (MonoMethyl-K5) staining in C6 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated 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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Histone H4 (MonoMethyl-K5) Rabbit Polyclonal Antibody

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DATA (CONTINUED)



Direct ELISA antibody dose-response curve using Anti-Histone H4 (MonoMethyl-K5) Antibody. Antigen (methyl-peptide and non-methyl-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.