

Anti-Histone H3 (MonoMethyl-K4) Antibody

Catalog # AP61429

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P68431
Other Accession	Q71DI3 , P84243 , Q6NXT2
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15404

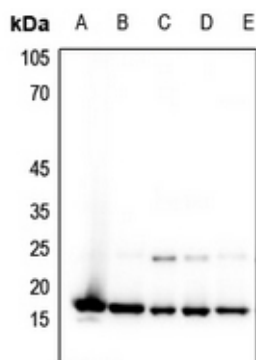
Additional Information

Gene ID	8350;8351;8352;8353;8354;8355;8356;8357;8358;8968
Other 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; H3F3C; Histone H3.3C; Histone H3.5
Target/Specificity	KLH-conjugated synthetic Mono-methylated peptide corresponding to residues surrounding K4 of human Histone H3 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IH (1/50 - 1/200) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

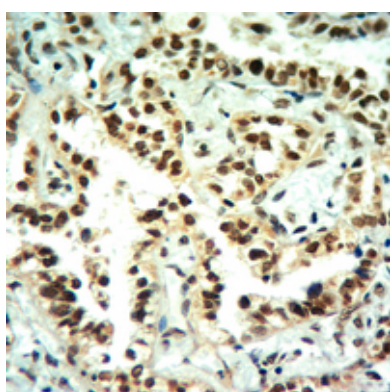
Protein Information

Name	H3C1 (HGNC:4766)
Synonyms	H3FA, HIST1H3A
Function	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.

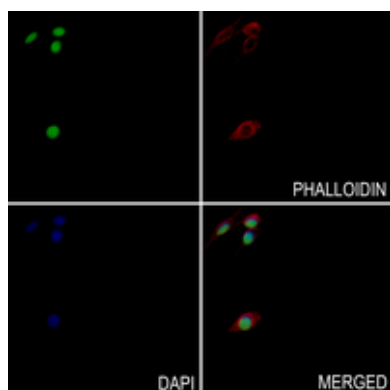
Images



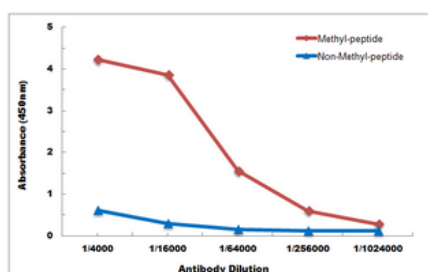
Western blot analysis of Histone H3 (MonoMethyl-K4) expression in MCF7 (A), U2OS (B), DLD (C), rat lung (D), rat kidney (E) whole cell lysates. (Predicted band size: 15 kD; Observed band size: 17 kD)



Immunohistochemical analysis of Histone H3 (MonoMethyl-K4) staining in human lung 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 (MonoMethyl-K4) 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 AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Direct ELISA antibody dose-response curve using Anti-Histone H3 (MonoMethyl-K4) 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.