

HIST1H2AG Polyclonal Antibody

Catalog Number PA5-24822

Product data sheet

| Details | | Species Reactivity | |
|--------------------|--|--|-----------------------|
| Size | 400 µL | Species reactivity | Human |
| Host/Isotope | Rabbit / IgG | Published species | Human, Not Applicable |
| Class | Polyclonal | Tested Applications | |
| Type | Antibody | Dilution * | |
| Immunogen | KLH conjugated synthetic peptide between 103-130 amino acids from the C-terminal region of human HIST1H2AL | ChIP assay (ChIP) | 1.5 µg/1x10^6 cells |
| | | Flow Cytometry (Flow) | 1:10-1:50 |
| Conjugate | Unconjugated | Immunohistochemistry (Paraffin) (IHC (P)) | 1:50-1:100 |
| Form | Liquid | Western Blot (WB) | 1:1,000 |
| Purification | Protein A, Antigen affinity chromatography | Immunocytochemistry (ICC/IF) | 1:100 |
| Storage buffer | PBS | * Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls. | |
| Contains | 0.09% sodium azide | | |
| Storage Conditions | -20° C, Avoid Freeze/Thaw Cycles | | |

Product specific information

This antibody is predicted to react with bovine, mouse and rat based on sequence homology.

Background/Target Information

Histones are nuclear proteins that play an important role in maintaining the structure of the chromosome in eukaryotes. The nucleosome is made up of around 146bp of DNA, which enfolds around a histone octomer unit comprising of four major histones, H2A, H2B, H3 and H4. An important role of H2A is to ensure proper assembly or functioning of the centrometre. They also play an important role in gene regulation. The protein can be modified by acetylation and phosphorylation.

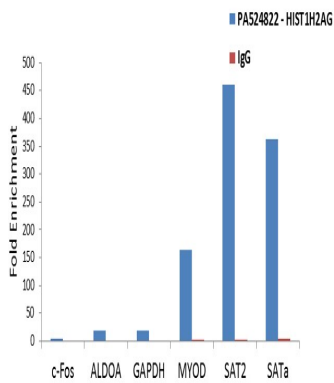
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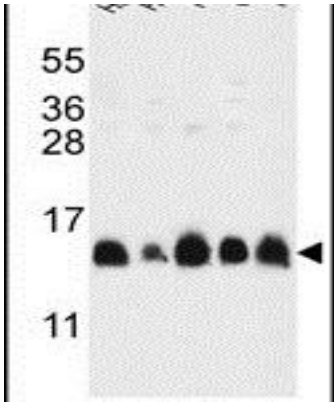
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Product Images For HIST1H2AG Polyclonal Antibody



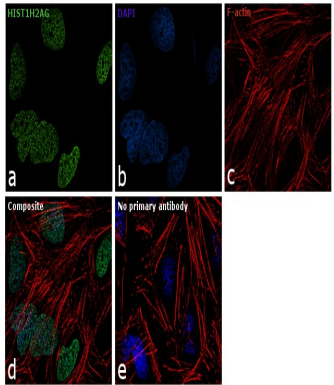
HIST1H2AG Antibody (PA5-24822)

Antibody specificity was demonstrated by detection of enrichment of the target protein at specific gene loci. Chromatin Immunoprecipitation (ChIP) was performed using Anti-HIST1H2AG Polyclonal Antibody (Product # PA5-24822) with relevant positive (c-Fos, ALDOA, GAPDH) and negative (MYOD, SAT2 satellite repeats, SAT Alpha) target genes/ binding sites. {RE}



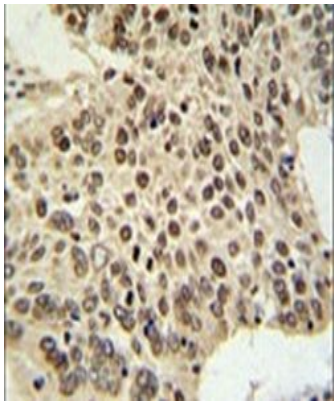
HIST1H2AG Antibody (PA5-24822) in WB

Western blot analysis using a HIST1H2AL polyclonal antibody (Product # PA5-24822) in HL-60, HepG2, K562, CEM, MCF-7 cell lysates (35 µg per lane).



HIST1H2AG Antibody (PA5-24822) in ICC/IF

Immunofluorescence analysis of HIST1H2AG was performed using 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with HIST1H2AG Rabbit Polyclonal Antibody (Product # PA5-24822) at 1:100 dilution in 0.1% BSA and incubated overnight at 4 degree and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



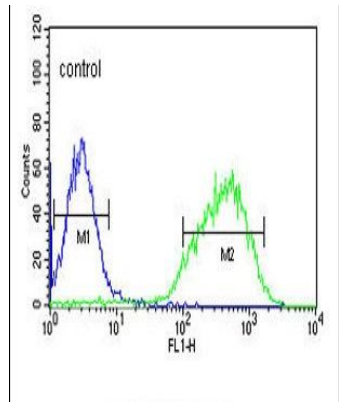
HIST1H2AG Antibody (PA5-24822) in IHC (P)

Immunohistochemistry analysis in formalin-fixed, paraffin-embedded human lung carcinoma using a HIST1H2AL polyclonal antibody (Product # PA5-24822), followed by HRP-conjugated secondary antibody and DAB staining.

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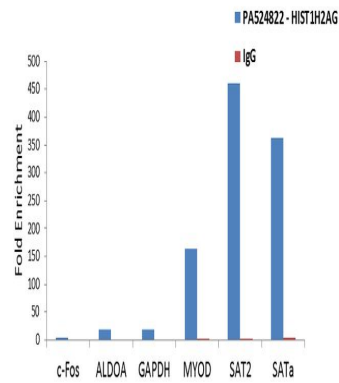
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HIST1H2AG Antibody (PA5-24822) in Flow

Flow cytometry analysis of HepG2 cells using a HIST1H2AL polyclonal antibody (Product # PA5-24822) (right) compared to a negative control cell (left) at a dilution of 1:10-50, followed by a FITC-conjugated goat anti-rabbit antibody



HIST1H2AG Antibody (PA5-24822) in ChIP

Enrichment of endogenous HIST1H2AG protein at specific gene loci using Anti-HIST1H2AG Antibody: Chromatin Immunoprecipitation (ChIP) was performed using Anti-HIST1H2AG Rabbit Polyclonal Antibody (Product # PA5-24822, 3 µg) on sheared chromatin from 2 million HeLa cells using the MAGnify ChIP system kit (Product # 49-2024). Normal Rabbit IgG was used as a negative IP control. The purified DNA was analyzed by qPCR with PCR primer pairs for the promoters of c-Fos, ALDOA, GAPDH used as positive and MYOD, SAT2 satellite repeats, SAT Alpha used as negative target genes/binding sites. Data is presented as fold enrichment of the antibody signal versus the negative control IgG using the comparative CT method.

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