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# HIST1H1C Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9164c

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | P16403 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB21233 |
| **Calculated MW** | 21365 |
| **Antigen Region** | 105-131 |

## Additional Information

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| **Gene ID** | 3006 |
| **Other Names** | Histone H12, Histone H1c, Histone H1d, Histone H1s-1, HIST1H1C, H1F2 |
| **Target/Specificity** | This HIST1H1C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 105-131 amino acids from the Central region of human HIST1H1C. |
| **Dilution** | WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | HIST1H1C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | H1-2 ( HGNC:4716) |
| **Function** | Histone H1 protein binds to linker DNA between nucleosomes forming the macromolecular structure known as the chromatin fiber (PubMed:26581166, PubMed:38530350). Histone H1-2 is required for the condensation of nucleosome chains into higher-order structured fibers (PubMed:38530350). Compared to other histone H1 variants, H1-2 plays an essential role in |

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| | nucleosome condensation: its absence leads to global chromatin decompaction, which is not observed when depleting other histone H1 variants (PubMed:38530350). Histone H1-2 also acts as a histone reader: specifically recognizes and binds histone H3 trimethylated at 'lys-27' (H3K27me3) (PubMed:26581166). Histones H1 also promote formation of the H3K27me3 mark by the PRC2/EED-EZH2 complex, possibly by facilitating restoration of H3K27me3 post- replication (PubMed:37429872, PubMed:40516528). Together with histone H1-3, histone H1-2 acts as a regulator of splicing, most specifically exon skipping and intron retention events: histone H1-2 has a high affinity for exons and regulates splicing by affecting RNA polymerase II (RNAPII) elongation (PubMed:37922872). Also acts as a regulator of individual gene transcription through chromatin remodeling, nucleosome spacing and DNA methylation (PubMed:38530350). |
| **Cellular Location** | Nucleus. Nucleus, nucleolus Chromosome. Note=Enriched at the nuclear periphery and colocalizes with compacted DNA (heterochromatin) (PubMed:26581166, PubMed:38530350). Enriched within lamina-associated domains (PubMed:38530350). |

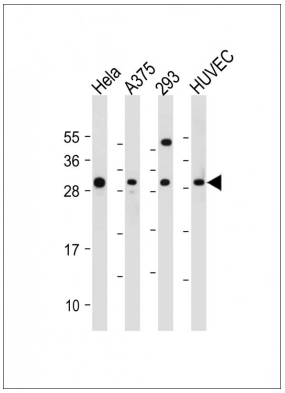
## Background

Histones H1 are necessary for the condensation of nucleosome chains into higher order structures.

## References

Mayya V., et.al., Sci. Signal. 2:RA46-RA46(2009).

## Images




All lanes : Anti-HIST1H1C Antibody (Center) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: A375 whole cell lysate Lane 3: 293 whole cell lysate Lane 4: HUVEC whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.