10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# H2AFY2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10726a

## Product Information

| | |
|---|---|
| **Application** | WB, FC, E |
| **Primary Accession** | Q9P0M6 |
| **Other Accession** | Q8CCK0, NP_061119.1 |
| **Reactivity** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB28554 |
| **Calculated MW** | 40058 |
| **Antigen Region** | 11-39 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 55506 |
| **Other Names** | Core histone macro-H2A2, Histone macroH2A2, mH2A2, H2AFY2, MACROH2A2 |
| **Target/Specificity** | This H2AFY2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 11-39 amino acids from the N-terminal region of human H2AFY2. |
| **Dilution** | WB~~1:1000 FC~~1:10~50 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** | H2AFY2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | MACROH2A2 ( HGNC:14453) |
| **Function** | Variant histone H2A which replaces conventional H2A in a subset of nucleosomes where it represses transcription. 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. May be involved in stable X chromosome inactivation.

**Cellular Location** Nucleus. Chromosome. Note=Enriched in inactive X chromosome chromatin (PubMed:11331621, PubMed:11262398) and in senescence- associated heterochromatin (PubMed:15621527)

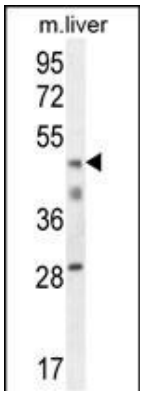
## Background

Variant histone H2A which replaces conventional H2A in a subset of nucleosomes where it represses transcription. 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. May be involved in stable X chromosome inactivation.

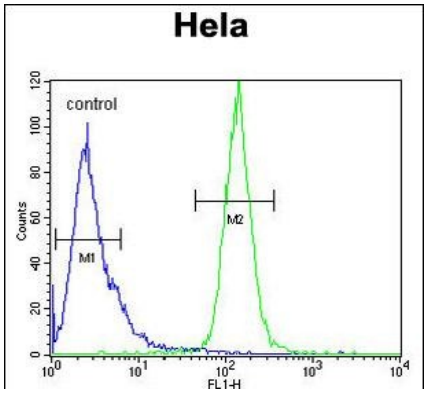
## References


Xu, J., et al. Proc. Natl. Acad. Sci. U.S.A. 107(5):2136-2140(2010)
Sporn, J.C., et al. Oncogene 28(38):3423-3428(2009)
Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)
Zhang, R., et al. Dev. Cell 8(1):19-30(2005)
Deloukas, P., et al. Nature 429(6990):375-381(2004)


## Images




H2AFY2 Antibody (N-term) (Cat. #AP10726a) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the H2AFY2 antibody detected the H2AFY2 protein (arrow).




H2AFY2 Antibody (N-term) (Cat. #AP10726a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.