

## H2AFY2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10726a

#### Specification

## H2AFY2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region FC, WB,E <u>O9P0M6</u> <u>O8CCK0</u>, <u>NP\_061119.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 40058 11-39

## H2AFY2 Antibody (N-term) - 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** FC~~1:10~50 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** H2AFY2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### H2AFY2 Antibody (N-term) - Protein Information

Name MACROH2A2 (<u>HGNC:14453</u>)



**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)

### H2AFY2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### H2AFY2 Antibody (N-term) - 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.

# H2AFY2 Antibody (N-term) - 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.

# H2AFY2 Antibody (N-term) - 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)