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H2AFY antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14274

Product Information

Application	WB
Primary Accession	O75367
Other Accession	NM_138609, NP_613075
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39184

Additional Information

Gene ID	9555
Alias Symbol	H2A.y, H2A/y, H2AF12M, H2AFJ, MACROH2A1.1, mH2A1, macroH2A1.2
Other Names	Core histone macro-H2A.1, Histone macroH2A1, mH2A1, Histone H2A.y, H2A/y, Medulloblastoma antigen MU-MB-50.205, H2AFY, MACROH2A1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-H2AFY antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	H2AFY antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

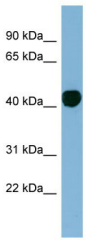
Name	MACROH2A1 (HGNC:4740)
Function	Variant histone H2A which replaces conventional H2A in a subset of nucleosomes where it represses transcription (PubMed:12718888, PubMed:15621527, PubMed:16428466). Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template (PubMed:15897469). Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability (PubMed:15897469). DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Involved in stable X chromosome inactivation (PubMed:15897469). Inhibits the binding of transcription factors,

	including NF-kappa-B, and interferes with the activity of remodeling SWI/SNF complexes (PubMed:12718888, PubMed:16428466). Inhibits histone acetylation by EP300 and recruits class I HDACs, which induces a hypoacetylated state of chromatin (PubMed:16107708, PubMed:16428466).
Cellular Location	Nucleus. Chromosome. Note=Enriched in inactive X chromosome chromatin and in senescence-associated heterochromatin (PubMed:15621527, PubMed:15897469, PubMed:9634239). Recruited to DNA damage sites in an APLF-dependent manner (PubMed:21211722, PubMed:29905837).
Tissue Location	Widely expressed..

References

Lee Y.,et al.Biochim. Biophys. Acta 1399:73-77(1998).
Mao M.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:8175-8180(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Schmutz J.,et al.Nature 431:268-274(2004).
Behrends U.,et al.Int. J. Cancer 106:244-251(2003).

Images



WB Suggested Anti-H2AFY Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: NCI-H226 cell lysate
H2AFY is strongly supported by BioGPS gene expression data to be expressed in NCI-H226