



Histone H2A (phospho Thr121) Polyclonal Antibody

Catalog No	YP-Ab-01412
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	HIST1H2AB
Immunogen	The antiserum was produced against synthesized peptide derived from human Histone H2A around the phosphorylation site of Thr121. AA range:81-130
Specificity	Phospho-Histone H2A (T121) Polyclonal Antibody detects endogenous levels of Histone H2A protein only when phosphorylated at T121.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ,IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	H2A histone family;member P;H2A.1;H2A.1b;H2A/n;H2A/p;H2A1_HUMAN; H2AF;H2AFC;H2AFD ANDHIST1H2AL;H2AFD;H2AFI;H2AFN ANDHIST1H2AG; H2AFN;H2AFP;HIST1H2AI;HIST1H2AJ;HIST1H2AK;HIST1H2AL;HIST1H2AM; Histone 1;H2ag;Histone cluster 1;Histone H2A type 1;Histone H2A.c/d/i/n/p; Histone H2A/p;pH2A/f;H2A histone family member A;H2A histone family member M;H2A.2;H2A/a;H2A/m;H2A1B_HUMAN;H2AFA;H2AFM;HIST1H2AB; HIST1H2AE;Histone 1 H2ab;Histone 1 H2ae;Histone cluster 1 H2ab;Histone cluster 1 H2ae;Histone H2A type 1-B/E;Histone H2A.2;Histone H2A/a;Histone H2A/m;Histone H2AE;H2a 615;H2A;H2A GL101;H2A/O;H2A/q;H2AFE;H2AFL; H2AFO;H2AFQ;HIST2H2AA;HIST2H2AA3;HIST2H2AB;HIST2H2AC;Histone 2 H2aa3;Histone 2 H2ab;Histone 2 H2ac;Histone H2A type 1 B;Histone H2A type 1 C;Histone H2A type 1 E;Histone H2A type 1 J;MGC74460;Histone H2A; HIST1H2AG;HIS
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Nucleus. Chromosome.
Tissue Specificity	Bone,Brain,Colon,Eye,Lymph,PCR rescued clones,Placenta,Sple


Function

function:Core component of nucleosome. 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.,mass spectrometry:Monoisotopic with N-acetylserine PubMed:16457589, PTM:Deiminated on Arg-4 in granulocytes upon calcium entry., PTM:Monoubiquitination of Lys-120 by RING1 and RNF2/RING2 complex gives a specific tag for epigenetic transcriptional repression and participates in X chromosome inactivation of female mammals. It is involved in the initiation of both imprinted and random X inactivation. Ubiquitinated H2A is enriched in inactive X chromosom

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H2A family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015],

matters needing attention

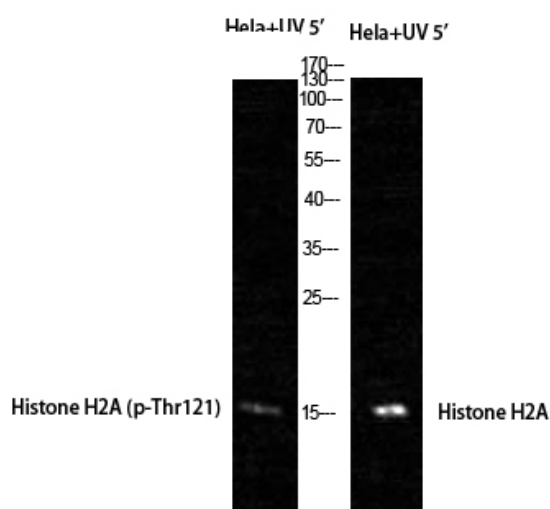
Avoid repeated freezing and thawing!

Usage suggestions

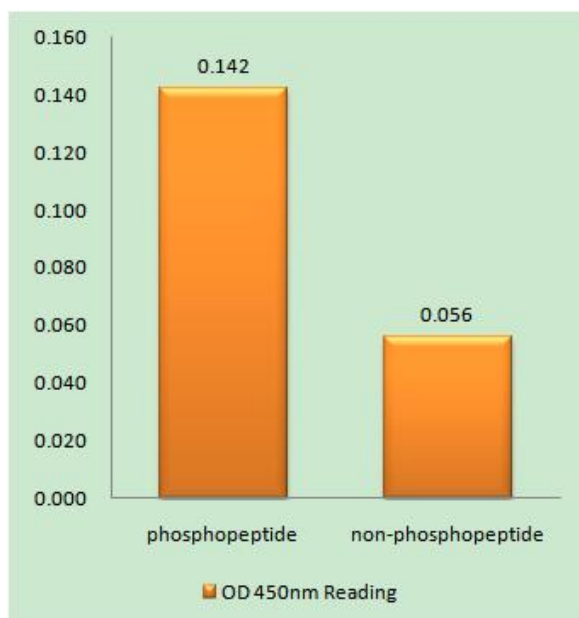
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



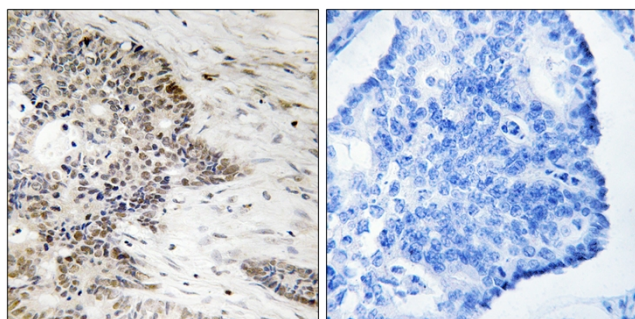
Products Images



Western Blot analysis of HeLa+UV 5' cells using Phospho-Histone H2A (T121) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Histone H2A (Phospho-Thr121) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using Histone H2A (Phospho-Thr121) Antibody. The picture on the right is blocked with the phospho peptide.