



Histone H3 (phospho Ser10) Polyclonal Antibody

Catalog No	YP-Ab-01249
Isotype	IgG
Reactivity	Human;Mouse;Rat;Drosophila melanogaster
Applications	WB;IHC;IHC-f;Flow Cyt;ICC;IF;ELISA
Gene Name	HIST1H3A
Protein Name	Histone H3.1
Immunogen	The antiserum was produced against synthesized peptide derived from human Histone H3.1 around the phosphorylation site of Ser10. AA range:1-50
Specificity	Phospho-Histone H3 (S10) Polyclonal Antibody detects endogenous levels of Histone H3 protein only when phosphorylated at S10.
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	Western Blot: 1/500 - 1/2000. IHC: 1/100 - 1/300. ICC/IF: 1/200 - 1/1000. ELISA: 1/10000. IHC-f,Flow Cyt 1:500
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HIST1H3A; H3FA; HIST1H3B; H3FL; HIST1H3C; H3FC; HIST1H3D; H3FB; HIST1H3E; H3FD; HIST1H3F; H3FI; HIST1H3G; H3FH; HIST1H3H; H3FK; HIST1H3I; H3FF; HIST1H3J; H3FJ; Histone H3.1; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3
Observed Band	15kD
Cell Pathway	Nucleus. Chromosome.
Tissue Specificity	Blood,Epithelium,Kidney,Lung,Ovary,Spleen,Uterus,
Function	caution:Was originally (PubMed:2587222) thought to originate from mouse.,developmental stage:Expressed during S phase, then expression strongly decreases as cell division slows down during the process of differentiation.,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,miscellaneous:This histone is only present in mammals and is



enriched in acetylation of Lys-15 and dimethylation of Lys-10 (H3K9me2).,PTM:Acetylation is generally I

Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015],

matters needing attention

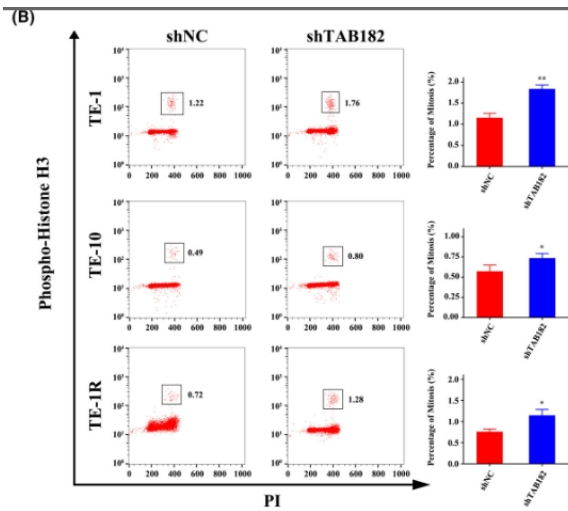
Avoid repeated freezing and thawing!

Usage suggestions

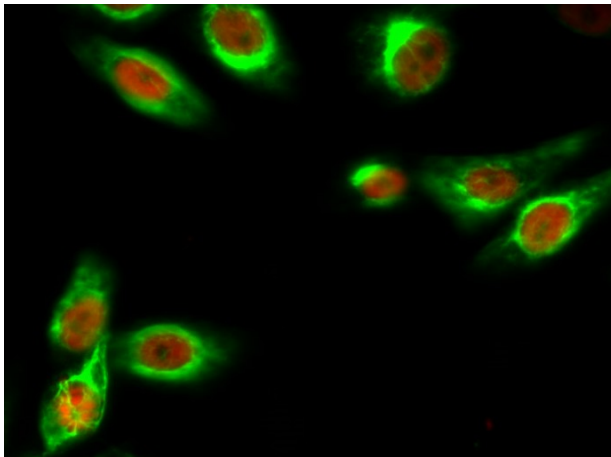
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



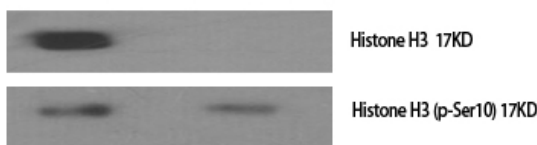
Products Images



Cao, Yuandong, et al. "Elevated TAB182 enhances the radioresistance of esophageal squamous cell carcinoma through G2-M checkpoint modulation." *Cancer Medicine* 10.9 (2021): 3101-3112.

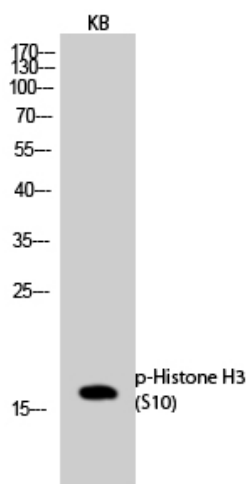


Immunofluorescence analysis of Hela cell. 1, Histone H3 (phospho Ser10) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). β-Tubulin Monoclonal Antibody (5G3) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).

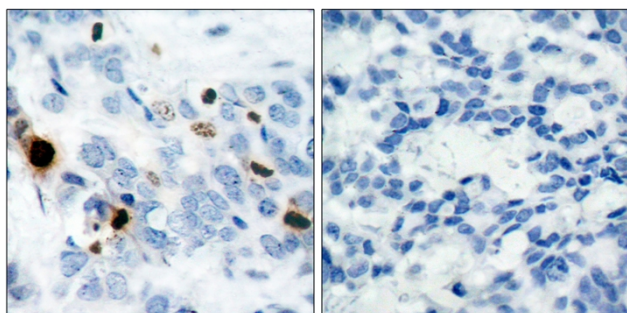


-	+	- phospho-peptide
-	-	+ non-phospho-peptide
+	+	+ Paclitaxel (1uM, 24hours)

Western Blot analysis of various cells using Phospho-Histone H3 (S10) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Western Blot analysis of KB cells using Phospho-Histone H3 (S10) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using Histone H3.1 (Phospho-Ser10) Antibody. The picture on the right is blocked with the phospho peptide.