



Histone H3 Monoclonal Antibody(1G1)

Catalog No	BYab-17560
Isotype	IgG
Reactivity	Human;Mouse;Rat;Yeast;Arabidopsis thaliana
Applications	WB;IHC;IF;IP
Gene Name	HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H3F3B
Protein Name	Histone H3.1/Histone H3.2/Histone H3.3
Immunogen	Recombinant Protein of Histone H3
Specificity	The antibody detects endogenous Histone H3 protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB: 1:2000-5000 IF:1:100-500 IP:1:200 IHC 1:50-300
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/f; Histone H3/h; Histone H3/i; Histone H3/j; Histone H3/k; Histone H3/l; HIST2H3A; HIST2H3C; H3F2; H3FM; HIST2H3D; Histone H3.2; Histone H3/m; Histone H3/o; H3F3A; H3.3A; H3F3; PP781; H3F3B; H3.3B; Histone H3.3
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

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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!

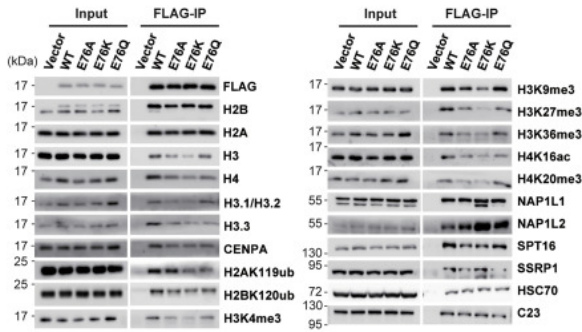
Usage suggestions

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



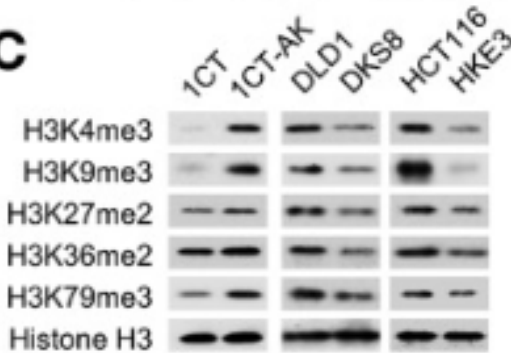
Products Images

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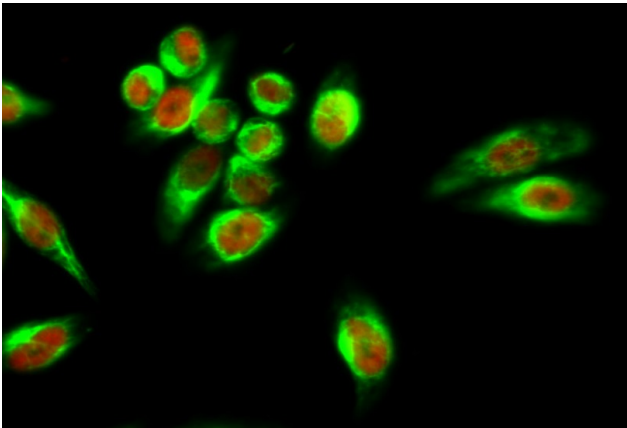


Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." *Journal of Biological Chemistry* 296 (2021).

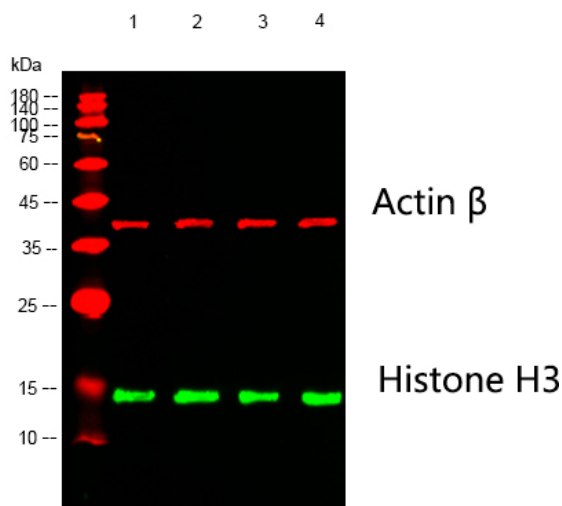
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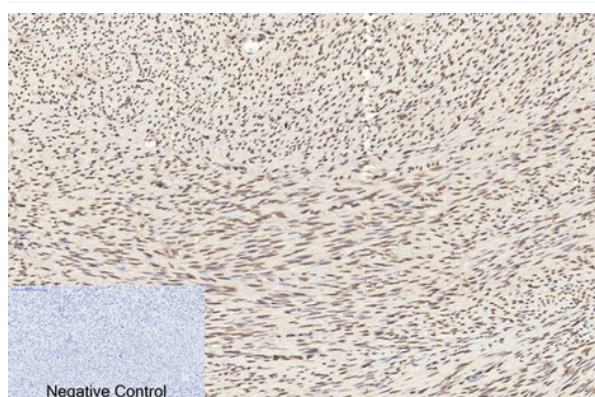
Wong, Chi Chun, et al. "In Colorectal Cancer Cells With Mutant KRAS, SLC25A22-Mediated Glutaminolysis Reduces DNA Demethylation to Increase WNT Signaling, Stemness, and Drug Resistance." *Gastroenterology* 159.6 (2020): 2163-2180.



Immunofluorescence analysis of Hela cell. 1, Amyloid- β Polyclonal Antibody (green) was diluted at 1:200 (4 $^{\circ}$ overnight). (red) was diluted at 1:200 (4 $^{\circ}$ overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog: RS3608 was diluted at 1:1000 (room temperature, 50min).



Western blot analysis of lysates from 1) HeLa, 2) Raw, 3) Mouse Brain Tissue, 4) Rat Brain Tissue cells, (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23910)was diluted at 1:10000, 37° 1hour. (Red) Actin β Polyclonal Antibody (Immunoway:YT0099) antibody was diluted at 1:5000 as loading control, 4° over night,Dylight 680 secondary antibody(Immunoway:RS23720)was diluted at 1:10000, 37° 1hour.



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,Histone H3 Monoclonal Antibody(1G1) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.