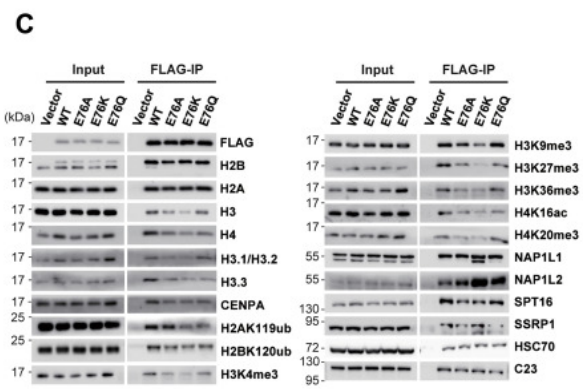
Histone H3 Monoclonal Antibody(1G1)

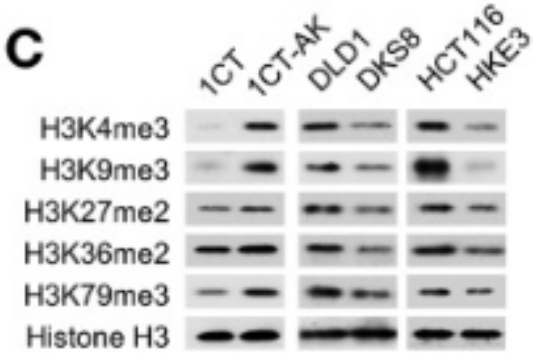
Catalog No	BYab-01110
Isotype	IgG
Reactivity	Human;Mouse;Rat;Yeast;Arabidopsis thaliana
Applications	WB;IHC;IF;IP
Gene Name	HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H3F3B
Protein Name	Histone H3.1/Histone H3.2/Histone H3.3
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

	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 l
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.

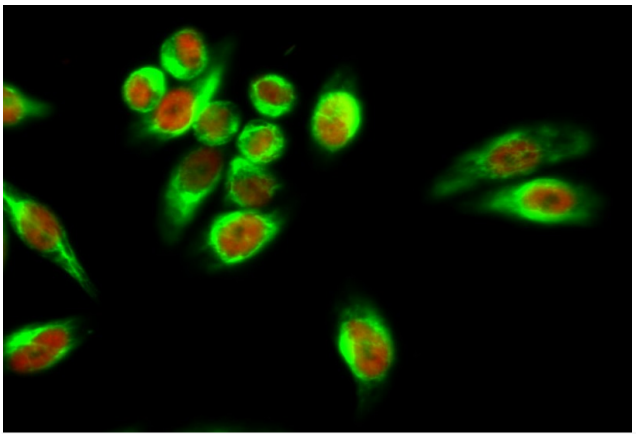
Products Images



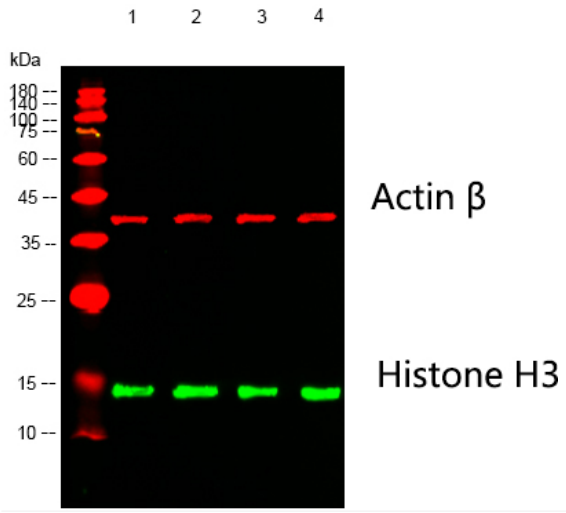
Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." Journal of Biological Chemistry 296 (2021).



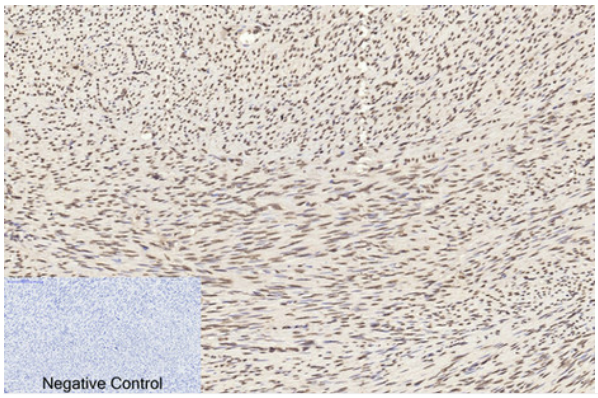
Wong, Chi Chun, et al. "In Colorectal Cancer Cells With Mutant KRAS, SLC25A22-Mediated Glutaminolysis Reduces DNA Demethylation to Increase WNT Signaling, Stemness, and Drug Resistance." Gastroenterology 159.6 (2020): 2163-2180.



Immunofluorescence analysis of Hela cell. 1,Amyloid-β Polyclonal Antibody(green) was diluted at 1:200(4° overnight). (red) was diluted at 1:200(4° 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.