

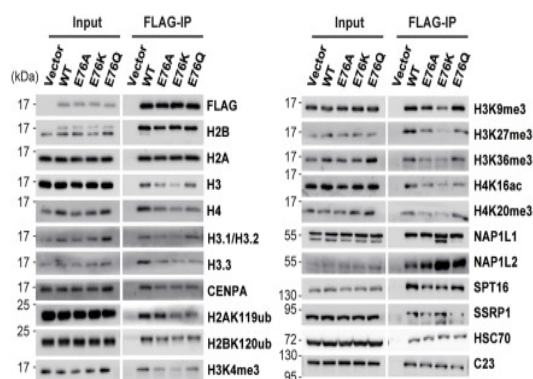
## Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3)

<b>Catalog No :</b>	YM3091
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;IP
<b>Target :</b>	Histone H3
<b>Fields :</b>	>>Neutrophil extracellular trap formation;>>Alcoholism;>>Shigellosis;>>Transcriptional misregulation in cancer;>>Systemic lupus erythematosus
<b>Gene Name :</b>	HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H3F3B
<b>Protein Name :</b>	Histone H3.1/Histone H3.2/Histone H3.3
<b>Human Gene Id :</b>	8350/8351/8352/8353/8354/8355/8356/8357/8358/8968
<b>Human Swiss Prot No :</b>	P68431/Q71DI3/P84243
<b>Mouse Gene Id :</b>	319152/15077/15078
<b>Rat Gene Id :</b>	291159/100361558
<b>Rat Swiss Prot No :</b>	Q6LED0/P84245
<b>Immunogen :</b>	Synthetic Peptide of Histone H3 (Tri Methyl Lys79)
<b>Specificity :</b>	The antibody detects endogenous Histone H3 (tri methyl K79) protein.
<b>Formulation :</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	WB 1:500-2000 IP:1:200 IF 1:200 IHC 1:50-300

<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	15kD
<b>Cell Pathway :</b>	Systemic lupus erythematosus;
<b>Background :</b>	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],
<b>Function :</b>	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
<b>Subcellular Location :</b>	Nucleus. Chromosome.
<b>Expression :</b>	Blood,Epithelium,Kidney,Lung,Ovary,Spleen,Uterus,
<b>Tag :</b>	orthogonal,ip,hot
<b>Sort :</b>	451
<b>No4 :</b>	1

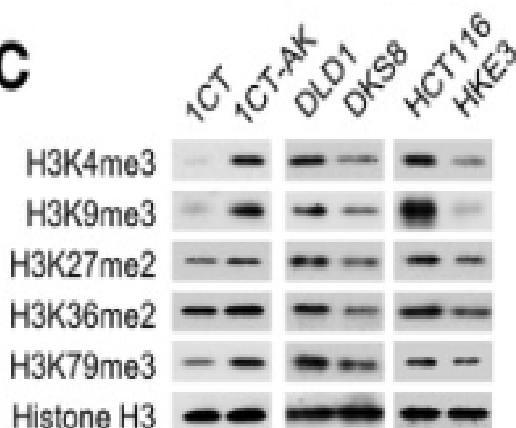
## Products Images

**C**

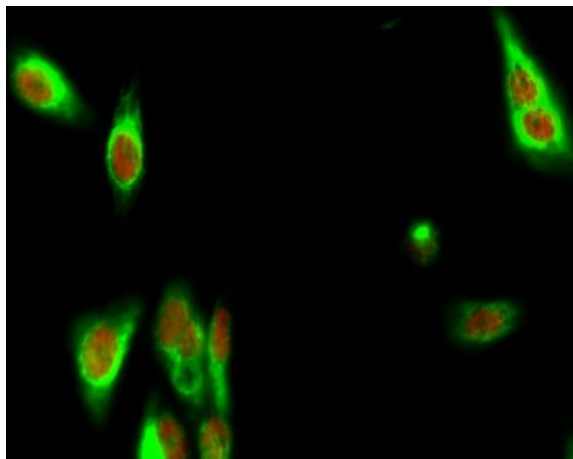


Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." *Journal of Biological Chemistry* 296 (2021).

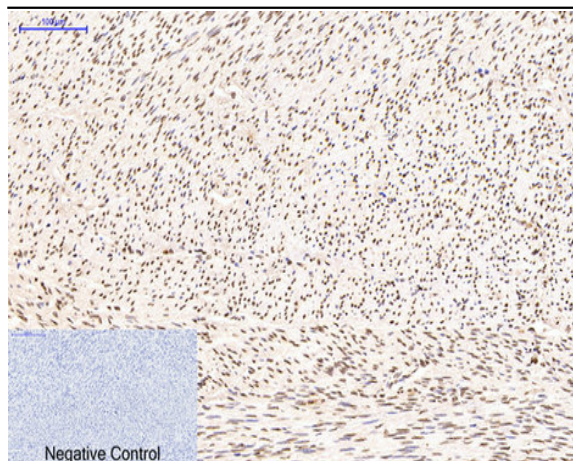
**C**



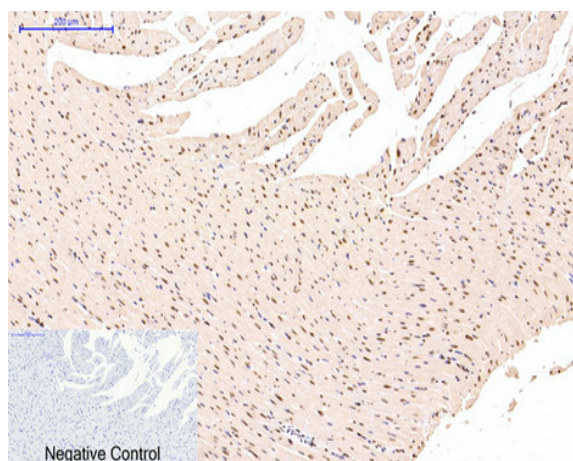
Wong, Chi Chun, et al. "In Colorectal Cancer Cells With Mutant KRAS, SLC25A22-Mediated Glutaminolysis Reduces DNA Demethylation to Increase WNT Signaling, Stemness, and Drug Resistance." *Gastroenterology* 159.6 (2020): 2163-2180.



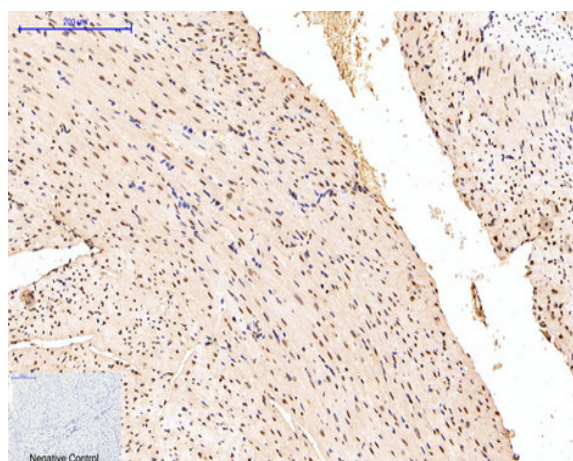
Immunofluorescence analysis of Hela cell. 1, Bek Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). (red) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog: RS3608 was diluted at 1:1000 (room temperature, 50min).



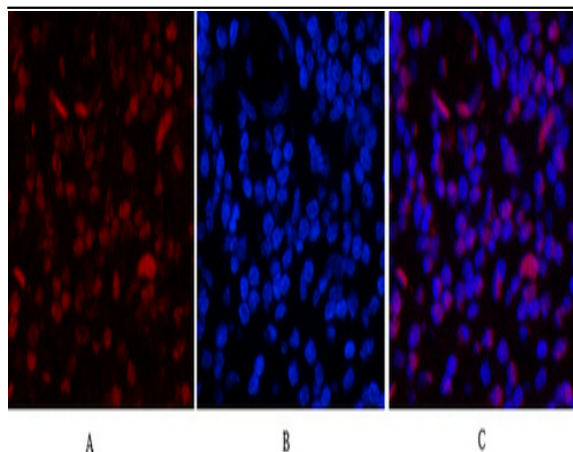
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3) was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



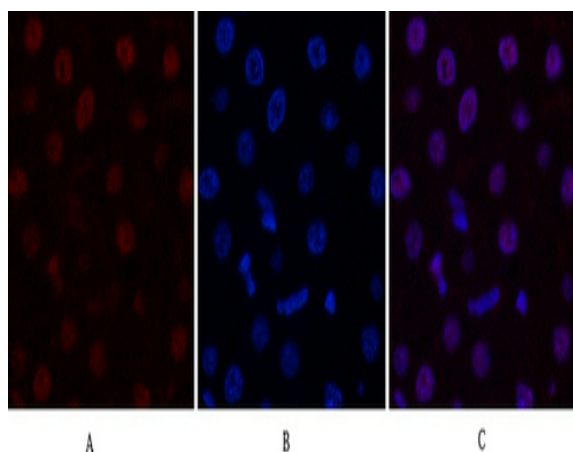
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1, Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3) was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



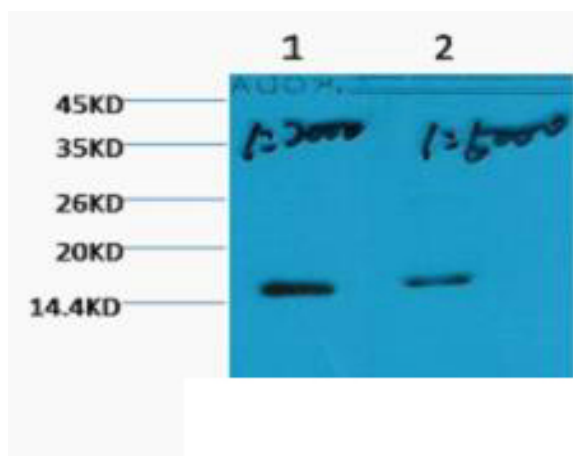
Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1, Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3) was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-appendix tissue. 1, Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

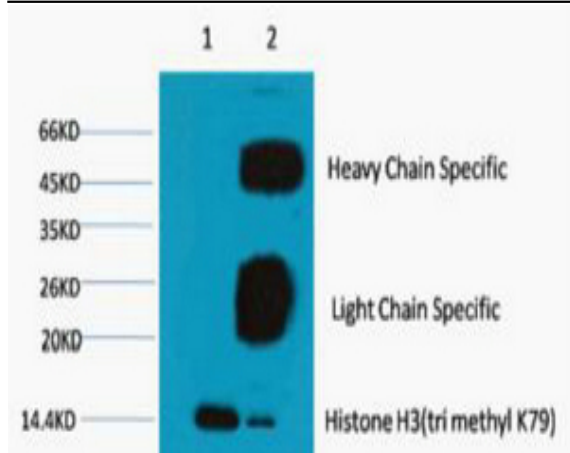


Immunofluorescence analysis of Rat-liver tissue. 1, Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of Hela, diluted at 1) 1:2000 2) 1:5000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).





1) Input: HeLa Cell Lysate 2) IP product: IP dilute 1:200