

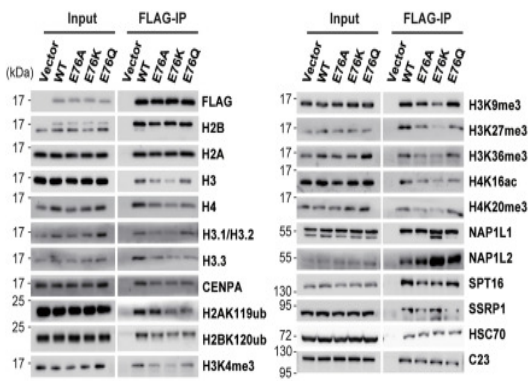
Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3)

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

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

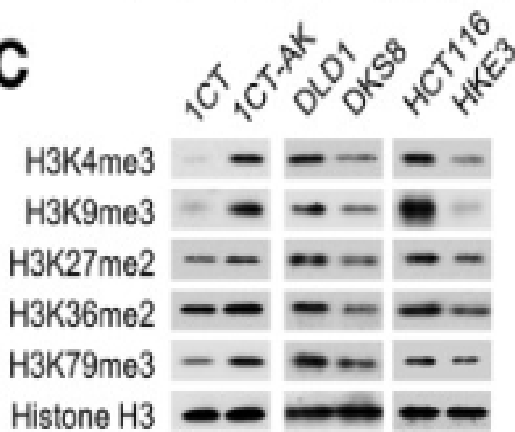
Products Images

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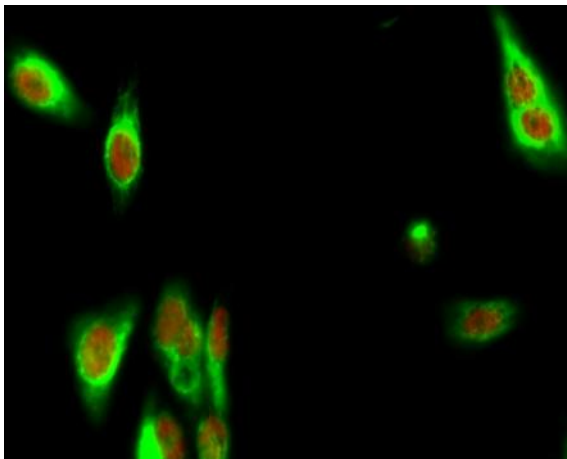


Kang, Tze Zhen Evangeline, et al. "The elevated transcription of ADAM19 by the oncohistone H2BE76K contributes to oncogenic properties in breast cancer." *Journal of Biological Chemistry* 296 (2021).

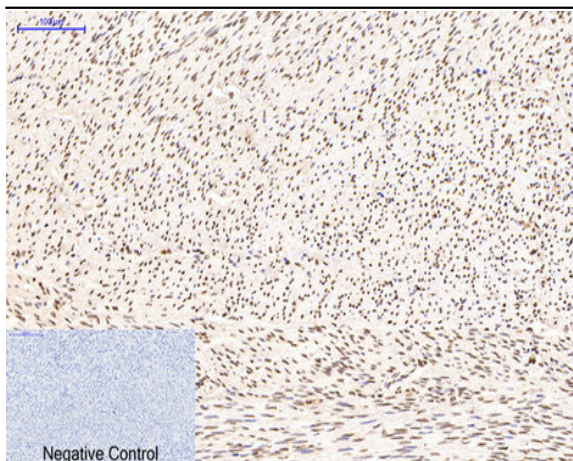
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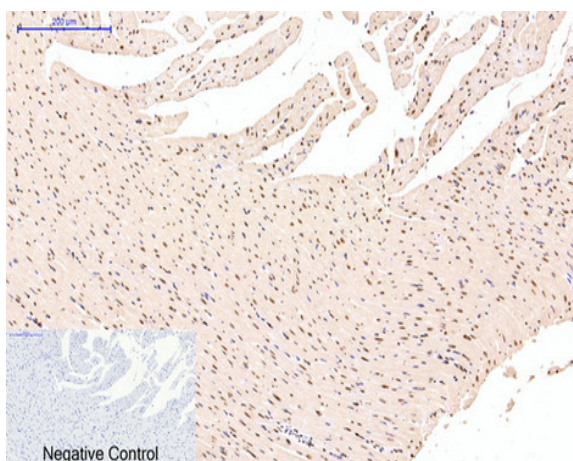
Wong, Chi Chun, et al. "In Colorectal Cancer Cells With Mutant KRAS, SLC25A22-Mediated Glutaminolysis Reduces DNA Demethylation to Increase WNT Signaling, Stemness, and Drug Resistance." *Gastroenterology* 159.6 (2020): 2163-2180.



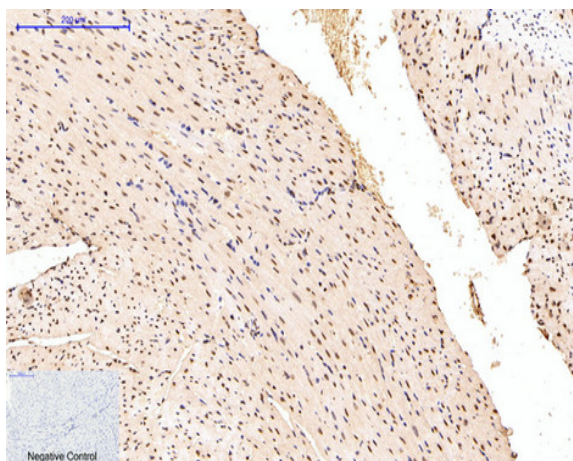
Immunofluorescence analysis of HeLa cell. 1, Bek Polyclonal Antibody (green) was diluted at 1:200 (4 ° overnight). (red) was diluted at 1:200 (4 ° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog:RS3608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



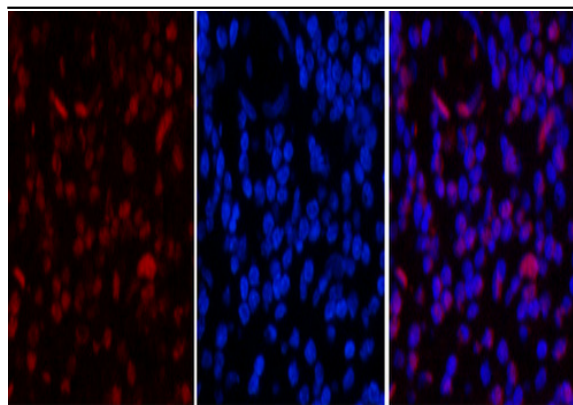
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, Histone H3 (Tri Methyl Lys79) Monoclonal Antibody(3G3) was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature,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

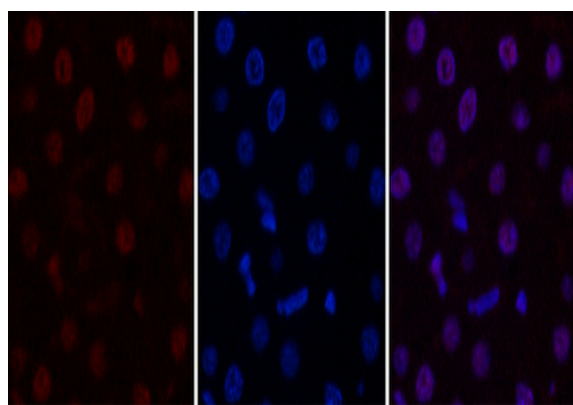


A

B

C

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

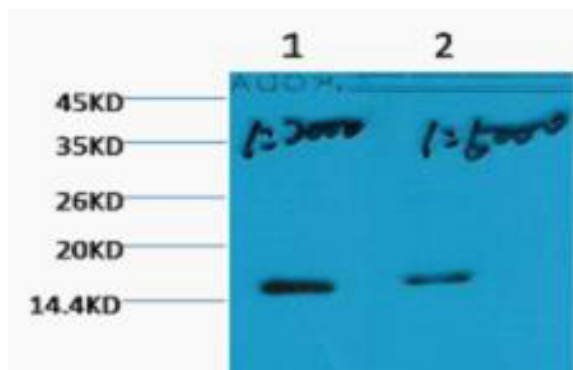


A

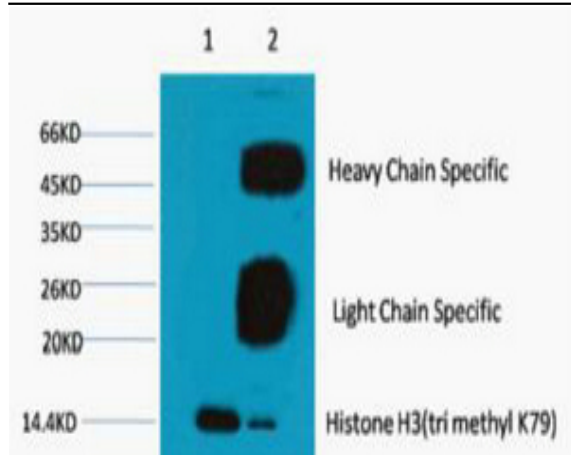
B

C

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, Inventibiotech, MN, USA).



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