Data Sheet (Cat.No.TMAH-00770)

Anti-Mono-methyl-Histone H3.1 (Lys9) Antibody (3G645)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	3G645
Purification:	Affinity-chromatography

Applications

Verified Activity:	1. IHC image of TMAH-00770 diluted at 1:100 and staining in paraffin-embedded human gastric cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.06% DAB. 2. Immunofluorescence staining of A549 with TMAH-00770 at 1:20, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 489-congugated AffiniPure Goat Anti-Rabbit IgG(H+L). 3. Overlay Peak curve showing A549 cells stained with TMAH-00770 (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^6 cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG (H+L) at 1:200 dilution for 35min at 4°C.Control antibody (green line) was rabbit IgG (1μg/1*10^6 cells) used under the same conditions. Acquisition of >10,000 events was performed.
Application:	ELISA,FCM,IF,IHC
Recommended	IHC:1:50-1:200; IF:1:50-1:200; FCM:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: Human HIST1H3A
Antigen Species:	Human
Gene ID:	8350
Uniprot ID:	P68431
Synonyms:	Mono-Me-HIST1H3A (K9);histone cluster 1, H3a;Mono-methyl-HIST1H3A (K9);MonoMe-H3K9; HIST1H3A, HIST1H3B, HIST1H3C, HIST1H3D, HIST1H3E, HIST1H3F, HIST1H3G, HIST1H3H, HIST1H3I, HIST1H3J;Histone H3;HIST1H3A;Mono-Me-HIST1H3A (Lys9);Histone H3K9-monomethylated;H3K9me1
Biology Area:	Epigenetics and Nuclear Signaling

Research Background

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.