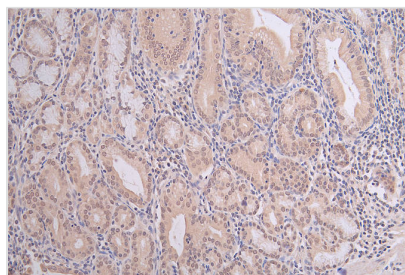




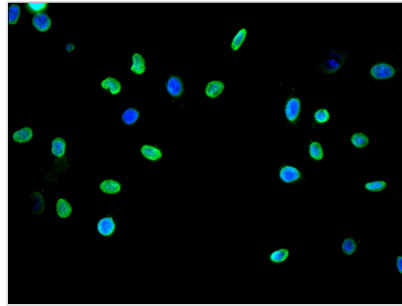
Mono-methyl-HIST1H3A (K9) Recombinant Monoclonal Antibody

Product Code	CSB-RA792403A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P68431
Immunogen	A synthesized peptide derived from Human HIST1H3A
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	HIST1H3A
Clone No.	13E1

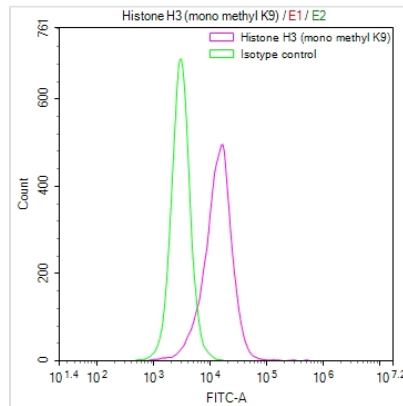
Image



IHC image of CSB-RA792403A0HU 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.



Immunofluorescence staining of A549 with CSB-RA792403A0HU 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-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Overlay Peak curve showing A549 cells stained with CSB-RA792403A0HU (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*10⁶cells) 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*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The process for generating the mono-methyl-HIST1H3A (K9) recombinant monoclonal antibody typically begins with the incorporation of the HIST1H3A antibody-encoding gene into expression vectors. These vectors are then transferred into host cells via polyethyleneimine-mediated transfection methods. The host cells containing these vectors are cultured to produce and excrete the antibodies. After purification through affinity chromatography, the antibodies undergo evaluations involving ELISA, IHC, IF, and FC assays, demonstrating their specific binding to the human HIST1H3A protein mono-methylated at K9.

HIST1H3A mono-methylated at K9 is typically found in regions of the genome associated with heterochromatin and plays a central role in epigenetic regulation by contributing to gene repression and the formation of transcriptionally silent heterochromatin. This modification is crucial for maintaining proper gene expression patterns and cellular identity and has implications for various biological processes and disease states.