Data Sheet (Cat.No.TMAB-07121)

Anti-Tri-methyl-Histone H3 (Lys79) Antibody (5K607)

Product Details

Ig Type:	IgG2b
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 15 kDa. Actual: 15 kDa.
Clone:	5K607
Purification:	Protein G purified

Applications

Verified Activity:	1. Paraformaldehyde-fixed, paraffin embedded (mouse liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (TMAB-07121) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining. 2. Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (ascites of TMAB-07121 3C7) at 1: 2000 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining. 3. Paraformaldehyde-fixed, paraffin embedded (mouse pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (TMAB-07121) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining. 4. Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (TMAB-07121) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining. 5. Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (TMAB-07121) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining. 6. Paraformaldehyde-fixed, paraffin embedded (human breast); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (ascites of TMAB-07121 3C7) at 1: 2000 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining.

7. Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (TMAB-07121) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining.
8. Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3) Monoclonal Antibody, Unconjugated (TMAB-07121) at 1: 200 overnight at 4°C, followed by operating according to SP Kit (Mouse) instructions and DAB staining.
9. Paraformaldehyde-fixed, paraffin embedded (Human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3 (tri methyl K79)) Monoclonal Antibody, Unconjugated (ascites of TMAB-07121 3C7) at 1: 2000 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining.
10. Paraformaldehyde-fixed, paraffin embedded (Mouse intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3 (tri methyl K79)) Monoclonal Antibody, Unconjugated (ascites of TMAB-07121 3C7) at 1: 2000 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining.
11. Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Histone H3 (tri methyl K79)) Monoclonal Antibody, Unconjugated (ascites of TMAB-07121 3C7) at 1: 2000 overnight at 4°C, followed by a conjugated secondary for 20 minutes and DAB staining.
12. Sample:
Hela Cell (Human) Lysate at 40 µg
NIH/3T3 Cell (Mouse) Lysate at 40 µg
293T Cell (Human) Lysate at 40 µg
Primary: Anti-Histone H3 (tri methyl K79) (TMAB-07121) at 1/2 000 dilution
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution
Predicted band size: 15 kD
Observed band size: 15 kD

Application:	WB,IHC-P,IHC-Fr,IF
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthesised methylpeptide: human Histone H3 around the methylation site of Tri Methyl K79
Antigen Species:	Human
Gene ID:	8350
Uniprot ID:	P68431

Research Background

Modulation of the chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of four core histone proteins (H2A, H2B, H3 and H4), is the primary building block of chromatin. The N-terminal tail of core histones undergoes different posttranslational modifications including acetylation, phosphorylation and methylation. These modifications occur in response to cell signal stimuli and have a direct effect on gene expression. In most species, the histone H2B is primarily acetylated at lysines 5, 12, 15 and 20. Histone H3 is primarily acetylated at lysines 9, 14, 18 and 23. Acetylation at lysine 9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms. Phosphorylation at Ser10 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis.