SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-Mono-Methyl-Histone H4 (Lys12)antibody

Catalog Number: SLM-60152R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Clone No.:	B11E4
Target:	Mono-Methyl-Histone H4 (Lys12)
Purification:	Affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB (1:500-2000) IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500) Flow-Cyt (1:50-100) ICC/IF (1:100-500) IP (1:25-1:50) ChIP (5μg/IP) Not yet tested in other applications. Optimal working dilutions must be determined by the end user.
Reactivity:	Human,Mouse,Rat
Subcellular Location:	The nucleus
Background:	Histone post-translational modifications, also known as the "histone code", function by regulating chromatin structure and are an important research branch of epigenetics. Post-translational modifications on histones include acetylation, methylation, phosphorylation and some novel acylation modifications discovered in recent years. These histone modifications directly affect the binding of chromatin to transcription factors or other epigenetic regulators, and change genome stability and gene transcription, etc. Histone methylation usually occurs on the amino groups of the side chains of lysine and arginine of core histones. Histone methylation can either promote or

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SUNLONG

SunLong Biotech Co.,LTD

Tel: 0086-571-56623320 Fax:0086-571-56623318

E-mail:sales@sunlongbiotech.com

www.sunlongbiotech.com

	inhibit gene transcription, depending on whether histone methylation occurs on lysine or arginine and the number of methyl groups (lysine can undergo mono-, di- and tri-methylation, and arginine can undergo mono-, symmetric and asymmetric di-methylation). Histone lysine methylation usually occurs on lysine 4, 9, 27, 36 and 79 of histone H3 and lysine 5, 8, 12 and 20 of histone H4; arginine methylation usually occurs on arginine 2, 8, 17 and 26 of histone H3 and arginine 4 of histone H4. Protein methyltransferases (HMT) and histone demethylases (HDM) are the main regulatory factors of methylation modifications.

[VALIDATION IMAGES]

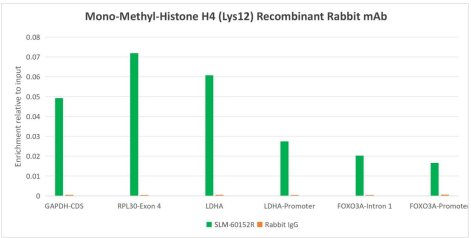


Figure 1. Chromatin immunoprecipitation was performed using cross-linked chromatin from 5×10⁶ HeLa cells per IP, with 5 µg of SLM-60152R antibody or 5 µg of normal rabbit IgG(negative control SL0295P), and 20 µL of Protein A/G MagBeads per IP. The immunoprecipitated DNA was quantified by real-time PCR using primers specific for the human GAPDH-CDS, RPL30 exon 4, LDHA, LDHA-promoter, FOXO3A-intron 1 and FOXO3A-promoter regions regions. The data are presented as enrichment of each sample relative to the total amount of input at each amplicon

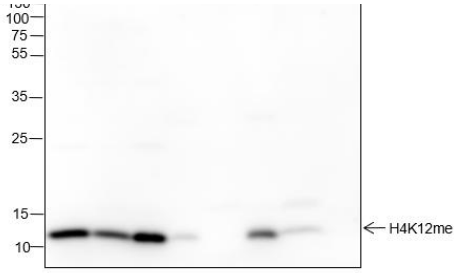


Figure 2. Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:2000 Primary ab incubation condition: 2 hours at room temperature Secondary ab: Goat Anti-Rabbit IgG H&L (HRP) Lysate: 1. HeLa, 2. NIH-3T3, 3. BRL, 4. Mouse heart，5. Rat heart, 6. Mouse kidney, 7. Rat kidney, 8. Recombinant Histone H4 Protein loading quantity: 20 µg Exposure time: 30 s Predicted MW: 11 kDa Observed MW: 11 kDa

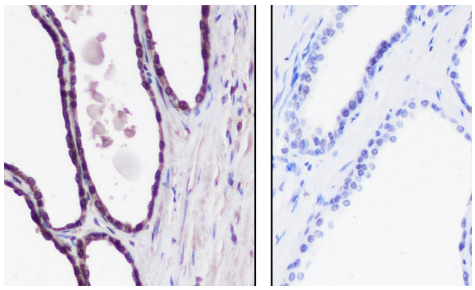


Figure 3. Tissue: Human prostate hyperplasis Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:500 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for SLM-60152R

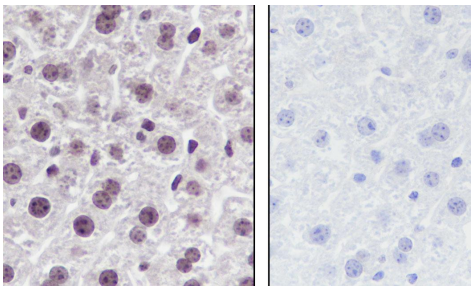


Figure 4. Tissue: Mouse liver Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:500 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for SLM-60152R

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SunLong Biotech Co.,LTD

Tel: 0086-571-56623320 Fax:0086-571-56623318

E-mail:sales@sunlongbiotech.com

www.sunlongbiotech.com

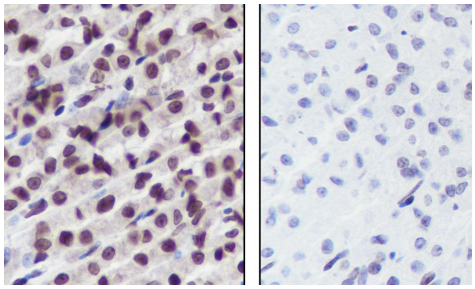


Figure 5. Tissue: Rat stomach Section type: Formalin fixed & Paraffin - embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:500 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Rabbit) (sp-0023) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for SLM-60152R

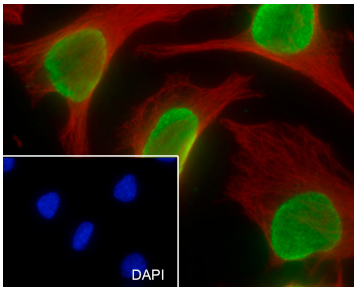


Figure 6. Cell line: HeLa Fixative: 100% Ice-cold methanol Permeabilization: 0.1% TritonX-100 Primary ab dilution: 1:50 Primary incubation condition: 4°C overnight Secondary ab: Goat Anti-Rabbit IgG Nuclear counter stain: DAPI (Blue) Counter stain: Tubulin (Red) Comment: Color green is the positive signal for SLM-60152R

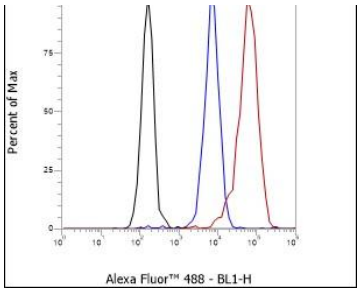


Figure 7. Cell line: HeLa Fixative: 4% Paraformaldehyde Permeabilization: 0.1% TritonX-100 Primary ab dilution: 1:50 Secondary ab: Goat anti Rabbit IgG Unlabelled control: The cell without incubation with primary antibody and secondary antibody (Black line). Isotype control: Rabbit monoclonal IgG (Blue line). Comment: Line red is the positive signal for SLM-60152R

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.