## Anti-Histone H3 (mono+di+tri methyl K79) Antibody [SR42-06]

## ET1602-41



**Product Type:** Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human, Mouse, Rat

Applications: WB, IHC-P

Molecular Wt: Predicted band size: 15 kDa

Clone number: SR42-06

**Description:** Eukaryotic histones are basic and water soluble nuclear proteins that form hetero-octameric nucleosome

particles by wrapping 146 base pairs of DNA in a left-handed super-helical turn sequentially to form chromosomal fiber. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form the octamer; formed of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. Over 80% of nucleosomes contain the linker Histone H1, derived from an intronless gene, that interacts with linker DNA between nucleosomes and mediates compaction into higher order chromatin. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains. Such modifications include methylation, citrullination, acetylation, phosphorylation, sumoylation,

ubiquitination and ADP-ribosylation.

Immunogen: Synthetic peptide within Human Histone H3 aa 56-105 / 136(tri methyl K79) conjugated to Keyhole Limpet

Haemocyanin (KLH).

Positive control: Mouse testis tissue lysate, CRC cell lysate, rat muscle tissue, rat skin tissue, human colon carcinoma tissue,

human skin tissue, mouse colon tissue, rat colon tissue.

**Subcellular location:** Nucleus, Chromosome.

Database links: SwissProt P68431 Human | P84243 Human | Q16695 Human | Q6NXT2 Human | Q71DI3 Human | P68433

Mouse | Q6LED0 Rat

**Recommended Dilutions:** 

**WB** 1:1,000-1:2,000 **IHC-P** 1:1,000-1:5,000

Storage Buffer: 1\*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% SodiumAzide.

**Storage Instruction:** Store at +4  $^{\circ}$ C after thawing. Aliquot store at -20  $^{\circ}$ C or -80  $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

**Purity:** Protein A affinity purified.

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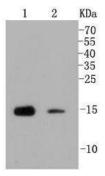


Technical:0086-571-89986345

Service mail:support@huabio.cn



**Images** 

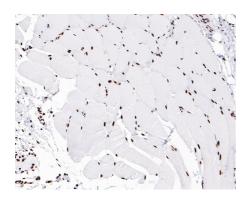


**Fig1:** Western blot analysis of Histone H3 (mono+di+tri methyl K79) on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1602-41, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.

### Positive control:

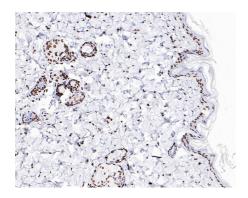
Lane 1: mouse testis tissue lysate

Lane 2: CRC cell lysate



**Fig2:** Immunohistochemical analysis of paraffin-embedded rat muscle tissue with Rabbit anti-Histone H3 (mono+di+tri methyl K79) antibody (ET1602-41) at 1/1.000 dilution.

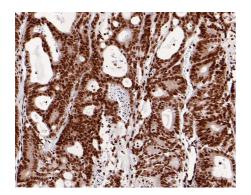
The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1602-41) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig3:** Immunohistochemical analysis of paraffin-embedded rat skin tissue with Rabbit anti-Histone H3 (mono+di+tri methyl K79) antibody (ET1602-41) at 1/1,000 dilution.

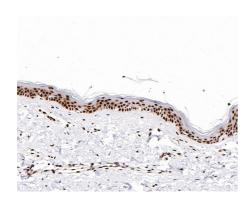
The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1602-41) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.





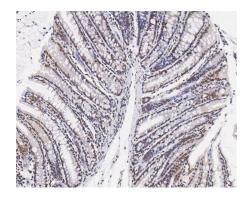
**Fig4:** Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue with Rabbit anti-Histone H3 (mono+di+tri methyl K79) antibody (ET1602-41) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1602-41) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig5:** Immunohistochemical analysis of paraffin-embedded human skin tissue with Rabbit anti-Histone H3 (mono+di+tri methyl K79) antibody (ET1602-41) at 1/1.000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with  $ddH_2O$  and PBS, and then probed with the primary antibody (ET1602-41) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

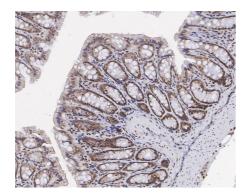


**Fig6:** Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Rabbit anti-Histone H3 (mono+di+tri methyl K79) antibody (ET1602-41) at 1/5.000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1602-41) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

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**Fig7:** Immunohistochemical analysis of paraffin-embedded rat colon tissue with Rabbit anti-Histone H3 (mono+di+tri methyl K79) antibody (ET1602-41) at 1/5,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (ET1602-41) at 1/5,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. Bhowmick, R. et al. 2015. Rotavirus disrupts cytoplasmic P bodies during infection. Virus Res. 210: 344-54.
- 2. Kumar, P. et al. 2014. All-trans retinoic Acid and sodium butyrate enhance natriuretic Peptide receptor a gene transcription: role of histone modification. Molecular pharmacology. 85: 946-57.