

## Anti-H4R3me2(sym) Antibody

01/20

CATALOG NO.: A2024-100 (100 µl)

**BACKGROUND DESCRIPTION:** Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H4 family. Transcripts from this gene lack poly A tails; instead, they contain a palindromic termination element. This gene is found in a histone cluster on chromosome 1. This gene is one of four histone genes in the cluster that are duplicated; this record represents the centromeric copy.

ALTERNATE NAMES: FO108; H4; H4/n; H4F2; H4FN; HIST2H4; Histone H4; HIST1H4A; HIST2H4A

ANTIBODY TYPE: Polyclonal

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: A synthetic methylation peptide targeting residues around Arginine 3 of human Histone H4

MOLECULAR WEIGHT: 13 kDa

**PURIFICATION:** Affinity purified

FORM: Liquid

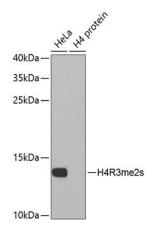
FORMULATION: In PBS with 0.02% sodium azide, 50% glycerol, pH 7.3

SPECIES REACTIVITY: Human, Mouse, Rat

STORAGE CONDITIONS: Store at -20°C. Avoid freeze / thaw cycles

APPLICATIONS AND USAGE: WB 1:500 - 1:2000, IHC 1:50 - 1:200, IF 1:50 - 1:200

Note: This information is only intended as a guide. The optimal dilutions must be determined by the user



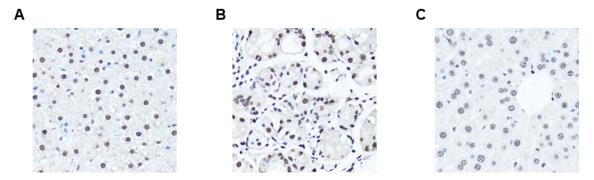
Western blot analysis of H4R3me2(sym) expression in HeLa cells and H4 protein. HRP-conjugated goat antirabbit IgG (H+L) was used as secondary antibody at 1:10000 dilution. 25  $\mu$ g of lysates/proteins were loaded per lane. 3% nonfat dry milk in TBST was used as blocking buffer.

|              | H3R2  |      | H3K4  |      | H3R8  |      | Н3К9  |      | H3R17 |      | H3R26 |      |
|--------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|              | 1009  | 50n9 | 10ng  | 50n9 | 10ng  | 50n9 | 1009  | 50ng | 1009  | 50ng | 1009  | 50ng |
| me0          | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
| me1          | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
| me2/<br>me2a | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
| me3/<br>me2s | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
|              | H3K27 |      | H3K36 |      | H3K56 |      | H3K79 |      | H4R3  |      | H4K20 |      |
| me0          | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
| me1          | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
| ne2/<br>ne2a | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    |
| me3/<br>me2s | 0     | 0    | 0     | 0    | 0     | 0    | 0     | 0    | 0     | •    | 0     | 0    |

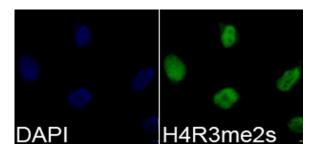
Dot-blot analysis of methylation peptides using Anti-H4R3me2(sym) antibody.







Immunohistochemistry of paraffin-embedded rat liver (A), human stomach (B), and mouse liver (C) using Anti-H4R3me2(sym) antibody at dilution of 1:100 (40x lens).



Immunofluorescence analysis of 293T cells using Anti-H4R3me2(sym) antibody. Blue: DAPI for nuclear staining.

## **RELATED PRODUCTS:**

H4pan polyclonal antibody (6825) Anti- Histone H4 Rabbit Monoclonal Antibody (A1139) H4K20me3 polyclonal antibody (6877) H4K20me1 monoclonal antibody (6819)

FOR RESEARCH USE ONLY! Not to be used on humans.

