



# Histone H3 (Tri-Methyl-K5) Polyclonal Antibody

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <b>Catalog No</b>         | YP-Ab-04405                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Reactivity</b>         | Human:K5Mouse:K5Rat:K5                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Applications</b>       | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>          | HIST1H3A/HIST1H3B/HIST1H3C/HIST1H3D/HIST1H3E/HIST1H3F/HIST1H3G/HIST1H3H/HIST1H3I/HIST1H3J/HIST2H3A/HIST2H3C/HIST2H3D/H3F3A/H3F3B                                                                                                                                                                                                                                                                                                                                             |
| <b>Protein Name</b>       | Histone H3                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Synthesized Tri-Methyl peptide derived from human Histone H3. at AA range: K5                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Specificity</b>        | This antibody detects endogenous levels of Histone H3 at Human:K5Mouse:K5Rat:K5, It doesn't react with total protein.                                                                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Source</b>             | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                        |
| <b>Dilution</b>           | Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Purity</b>             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>           | H3K5ME3; HIST1H3A; H3FA; HIST1H3B; H3FL; HIST1H3C; H3FC; HIST1H3D; H3FB; HIST1H3E; H3FD; HIST1H3F; H3FI; HIST1H3G; H3FH; HIST1H3H; H3FK; HIST1H3I; H3FF; HIST1H3J; H3FJ; Histone H3.1; Histone H3/a; Histone H3/b; Histone H3/c; Histone H3/d; Histone H3/f; Histone H3/h; Histone H3/i; Histone H3/j; Histone H3/k; Histone H3/l; HIST2H3A; HIST2H3C; H3F2; H3FM; HIST2H3D; Histone H3.2; Histone H3/m; Histone H3/o; H3F3A; H3.3A; H3F3; PP781; H3F3B; H3.3B; Histone H3.3 |
| <b>Observed Band</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Cell Pathway</b>       | Nucleus. Chromosome.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Tissue Specificity</b> | Blood,Epithelium,Kidney,Lung,Ovary,Spleen,Uterus,                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Function</b>           | caution:Was originally (PubMed:2587222) thought to originate from mouse.,developmental stage:Expressed during S phase, then expression strongly decreases as cell division slows down during the process of differentiation.,function:Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in                         |



transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.,mass spectrometry: Monoisotopic with N-acetylserine PubMed:16457589,miscellaneous: This histone is only present in mammals and is enriched in acetylation of Lys-15 and dimethylation of Lys-10 (H3K9me2).,PTM: Acetylation is generally I

## Background

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 H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Aug 2015],

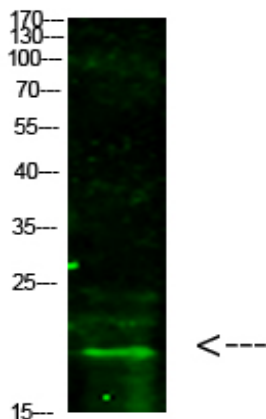
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of HeLa cells using primary antibody diluted at 1:1000 (4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour)