

Product datasheet for **TA397472**

H3C14 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ChIP, IF, IHC, WB
Recommended Dilution:	WB: 1:500 IHC: 1:1000 IF: 1:1000 ChIP: 2-5µg/million cells
Reactivity:	C. elegans, Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Histone H3 [ac Lys4] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 4 of human Histone H3.2.
Specificity:	Anti-Histone H3 [ac Lys4] was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with human Histone H3.2. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, and C. elegans. Predicted to react with many species including rat, chicken, Xenopus, Drosophila, and plant based on 100% sequence homology. Cross-reactivity with Histone H3 from other sources has not been determined.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	0.68 mg/ml - lot specific
Conjugation:	Unconjugated
Storage:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Stability:	Expiration date is one (1) year from date of receipt.
Gene Name:	histone cluster 2, H3c
Database Link:	Entrez Gene 333932 Human Entrez Gene 126961 Human Q71DI3



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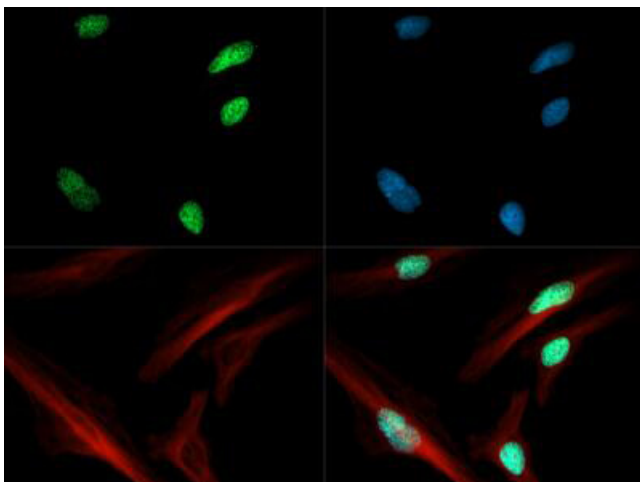
Background: In transcription, H3K4Ac is prevalent at the promoters of active genes. Usually, this modification peaks in the cell cycle after dimethylation of H3K9 occurs, which indicates that there are sequential actions of these two modifications. Methylation that occurs on H3K4 concurrently with acetylation seems to act as an adjuster to the activation effects of acetylation. Shugoshin protein cannot bind to the centromere of active cells when H3K4 is acetylated, which reduces dimethylation, and thus slows meiosis and mitosis. Usually, H3K4Ac is a transitional modification, and will become further modified with methylation as transcription progresses, indicating complex transcriptional regulation. Anti-Histone H3 are ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.

Synonyms: rabbit anti-Histone H3 Ac Lys4 antibody, H3.3AH3F3H3F3B, H3.3B, H3 histone, family 3A, histone H3.3, MGC87783, MGC87782, H3K4ac

Note: Anti-Histone H3 [ac Lys4] antibody is tested for Western Blot, Immunocytochemistry, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4 kDa corresponding to Histone H3 protein by Western Blotting in HeLa histone prep lysate or the appropriate cell lysate or extract. Epi-Plus™ antibody production in collaboration with Novus Biologicals.

Protein Pathways: Systemic lupus erythematosus

Product images:



Immunofluorescence of Rabbit Anti-Histone H3 [ac Lys4] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [ac Lys4] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [ac Lys4] is nuclear and chromosomal. Staining: Histone H3 [ac Lys4] is expressed in green and the nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 566 (red).