

Product datasheet for **TA397470**

H3C14 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ChIP, IF, IHC, WB
Recommended Dilution:	WB: 1:500 IHC: 1:50 IF: 1:50 ChIP: 2-5µg/million cells
Reactivity:	C. elegans, Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Histone H3 [Dimethyl Lys4] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic dimethylated peptide surrounding Lysine 4 of human Histone H3.2.
Specificity:	Anti-Histone H3 [Dimethyl 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:	1.1 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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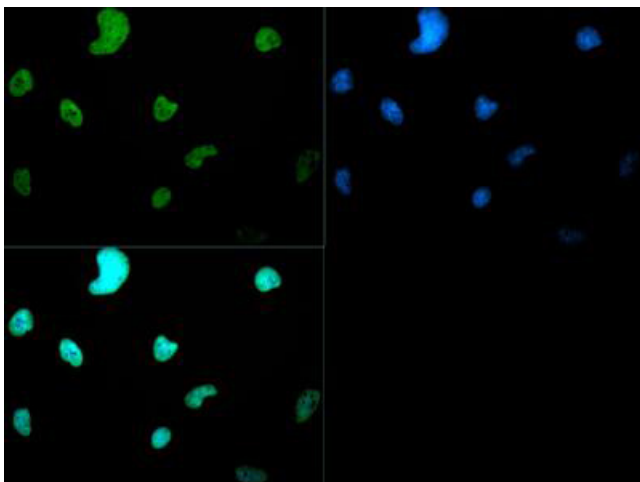
Background: H3K4me2 is a modification thought to have a role in transcriptional memory. In CD4+ T lymphocytes, H3K4Me2 is present within gene bodies regulating cellular function, but not in those of housekeeping genes, which indicates that the modification has a role in refining the tissue-specificity of expressed genes. This type of cellular identity targeting is also noted in work with human and mouse spermatozoa; the H3K4Me2 modification marks genes that are relevant in spermatogenesis. Most effects of H3K4Me2 seem to be attributed to its transcriptional activation; however, recent work also indicates that it may also play an RNA-dependent regressive role, related to the GAL-1 promoter. 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 dimethyl Lys4 antibody, H3.3B, H3.3AH3F3H3F3B, H3 histone, family 3A, histone H3.3, MGC87783, MGC87782, H3K4me2

Note: Anti-Histone H3 [Dimethyl Lys4] antibody is tested in Western Blot, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. This antibody is useful in Immunocytochemistry. 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 [Dimethyl Lys4] Antibody. Tissue: *C. elegans* embryo lysate. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Dimethyl 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 [Dimethyl Lys4] is nuclear and chromosomal. Staining: Histone H3 [Dimethyl Lys4] is expressed in green and the nuclei are counterstained blue with DAPI.