

## **Product datasheet for TA397495**

## H3C14 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** ChIP, IF, IHC, WB

Recommended Dilution: WB: 1:500

**IHC**: 1:150 **IF**: 1:150

**CHiP**: 2-5µg/million cells

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

Immunogen: Histone H3 [p Ser28] affinity purified antibody was prepared from whole rabbit serum

produced by repeated immunizations with a synthetic phosphorylated peptide surrounding

Serine 28 of human Histone H3.

**Specificity:** Anti-Histone H3 [p Ser28] was affinity purified from monospecific antiserum by

immunoaffinity chromatography. This antibody reacts with human Histone H3. 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:** 0.96 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 HumanEntrez Gene 126961 Human

Q71DI3



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Background:

Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational modifications work together to activate or repress the availability of DNA to be copied, transcribed, or repaired. These marks decide which DNA will be open and commonly active (euchromatin) or tightly wound to prevent access and activation (heterochromatin). Common histone modifications include methylation of lysine and arginine, acetylation of lysine, phosphorylation of threonine and serine, and sumoylation, biotinylation, and ubiquitylation of lysine. In particular, phosphorylation of serine 28 of H3 (H3 pS28) is a mitotic and immediate early gene marker. Although similar to phosphorylation on serine 10 of H3 in the role of chromatin condensation in mitosis and the ability to respond to external stimuli such as stress and mitogen activation, these two phosphorylation sites are independent and promote gene expression separately. Phosphorylation of S28 is modulated by MSK1, MSK2, and Aurora-B kinase. Anti-Histone H3 are ideal for researchers interested in Chromatin Research, Epigenetics, Chromatin Modifiers, Histones and Modified Histones research.

Synonyms:

rabbit anti-Histone H3 pS28 antibody, H3.3B, H3.3AH3F3H3F3B, H3 histone, family 3A, histone H3.3, MGC87782, MGC87783, H3pS28

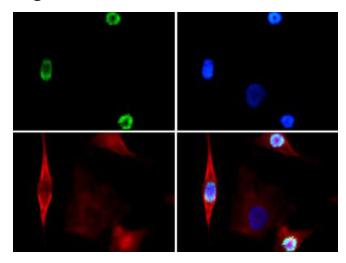
Note:

Anti-Histone H3 [p Ser28] antibody is tested for Western Blot and Immunofluorescence. This antibody is useful for Chromatin Immunoprecipitation, Dot Blot, and 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 [p Ser28] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [p Ser28] antibody at a 1:500 dilution for 1 h at RT. Secondary antibody: Dylight 488 secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [p Ser28] is nuclear and chromosomal. Staining: Histone H3 [p Ser28] is expressed in green, nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 550 (red).