

## **Product datasheet for TA397474**

## **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 [Trimethyl Lys4, p Thr6] affinity purified antibody was prepared from whole rabbit

serum produced by repeated immunizations with synthetic trimethylated/phosphorylated

peptides surrounding Lysine 4 and Threonine 6 of human Histone H3.2.

**Specificity:** Anti-Histone H3 [Trimethyl Lys4, p Thr6] 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 HumanEntrez Gene 126961 Human

Q71DI3



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Background:

Phosphorylation at T6 of methylated H3K4 prevents LSD1 from demethylating histone H3. Androgen receptor activated gene expression depends upon removal of methyl groups from H3K4, in cooperation with the Jumonji protein JMJD2C. However, when T6 is phosphorylated, there is a physical obstruction in the way of demethylation, and thus gene expression is repressed. The PHD finger of H3K4 seems to be an effector of histone modification, which can cause dysfunction in cellular fate regulation. Interestingly, the abundance of phosphorylation of this modified histone is a probable biomarker for the detection and the prognosis of certain cancers. 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 trimethyl Lys4 pT6 antibody, H3.3B, H3.3AH3F3H3F3B, H3 histone,

family 3A, histone H3.3, MGC87783, MGC87782, H3K4me3/pT6

Note:

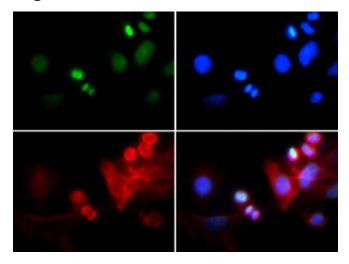
Anti-Histone H3 [Trimethyl Lys4, p Thr6] antibody is tested for Western Blot, Immunocytochemistry, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4 kDa corresponding to Histone H3 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 [Trimethyl Lys4, p Thr6] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Trimethyl Lys4, p Thr6] antibody at a 1:50 dilution for 1 h at RT. Secondary antibody: FITC secondary antibody at 1:10,000 for 45 min at RT. Localization: Histone H3 [Trimethyl Lys4, p Thr6] is nuclear and chromosomal. Staining: Histone H3 [Trimethyl Lys4, p Thr6] is expressed in green and the nuclei and alpha-tubulin are counterstained with DAPI (blue) and Dylight 594 (red).