

## Product datasheet for **TA397471**

### H3C14 Rabbit Polyclonal Antibody

#### Product data:

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Type:         | Primary Antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Applications:         | ChIP, IF, IHC, WB                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Recommended Dilution: | <b>WB:</b> 1:500<br><b>IHC:</b> 1:500<br><b>IF:</b> 1:500<br><b>ChIP:</b> 2-5 µg/million cells                                                                                                                                                                                                                                                                                                                                                                        |
| Reactivity:           | C. elegans, Human, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Host:                 | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clonality:            | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Immunogen:            | Histone H3 [Trimethyl Lys4] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic trimethylated peptide surrounding Lysine 4 of human Histone H3.2.                                                                                                                                                                                                                                                     |
| Specificity:          | Anti-Histone H3 [Trimethyl 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:        | 0.70 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:        | <a href="#">Entrez Gene 333932 Human</a> <a href="#">Entrez Gene 126961 Human</a><br><a href="#">Q71DI3</a>                                                                                                                                                                                                                                                                                                                                                           |



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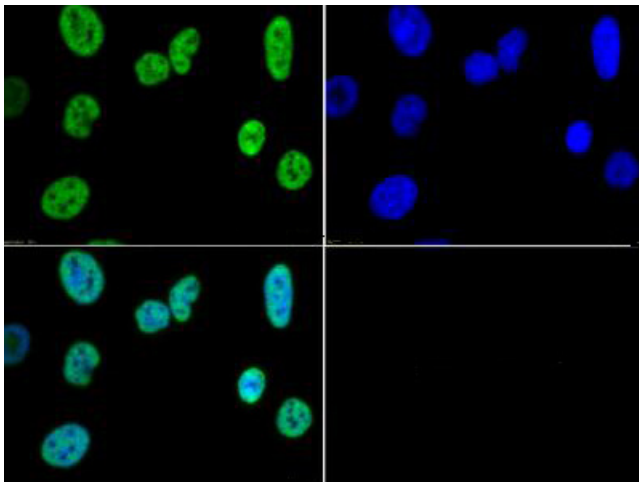
**Background:** H3K4Me3 is a common epigenetic modification that occurs in close proximity to nearly 2/3 of human gene promoters, and seems to balance another modification, H3K27Me3. These two modifications work in tandem to differentiate and/or maintain stem cells. Zygotic cells are activated in the most part by H3K4Me3; whereas, cancer is associated with disrupted associations between H3K4Me3 and ING1. 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 antibody, H3.3B, H3.3AH3F3H3F3B, H3 histone, family 3A, histone H3.3, MGC87783, MGC87782, H3K4me3

**Note:** Anti-Histone H3 [Trimethyl Lys4] antibody is tested in Western Blot, Immunofluorescence, Chromatin Immunoprecipitation, and Dot Blot. This antibody is useful for 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 K4/me3 Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Trimethyl Lys4] 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] is nuclear and chromosomal. Staining: Histone H3 K4me3 is expressed green and the nuclei are counterstained blue with DAPI.