

## Product datasheet for **TA397479**

### H3C14 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ChIP, IF, IHC, WB
Recommended Dilution:	<b>WB:</b> 1:500 <b>IHC:</b> 1:200 <b>IF:</b> 1:200 <b>ChIP:</b> 2-5µg/million cells
Reactivity:	C. elegans, Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Histone H3 [Asym-dimethyl Arg8] affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic dimethylated peptide surrounding Arginine 8 of human Histone H3.2.
Specificity:	Anti-Histone H3 [Asym-dimethyl Arg8] 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:	0.84 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> <a href="#">Q71DI3</a>



[View online »](#)

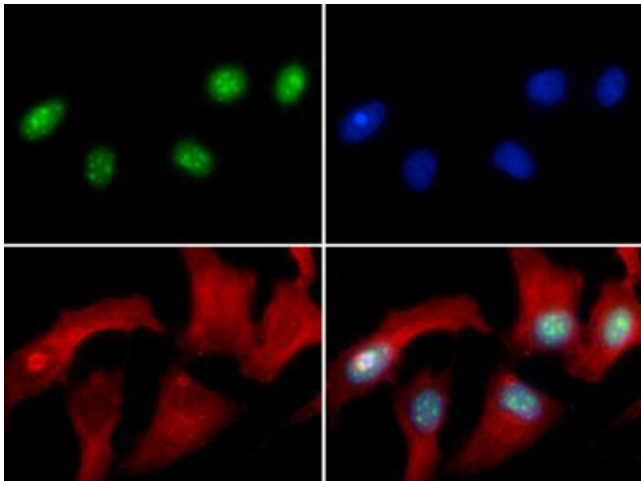
**Background:** Chromatin is the arrangement of DNA and proteins in which chromosomes are formed. Correspondingly, chromatin is formed from nucleosomes, which are comprised of a set of four histone proteins (H2A, H2B, H3, H4) wrapped with DNA. Chromatin is a very dynamic structure in which numerous post-translational 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, dimethylation of H3 Arg8 (H3 R8Me<sub>2</sub>) is known as a mark of transcriptional repression. The protein arginine methyltransferases PRMT5 and PRMT2 can both methylate Arg8, with PRMT2 specifically methylating in an asymmetric manner. In addition, asymmetric dimethylation of Arg8 inhibits H3K9 methylation by G9a, but not symmetric Arg8Me<sub>2</sub> does not. 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 Asym-dimethyl Arg8 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3R8me2a

**Note:** Anti-Histone H3 [Asym-dimethyl Arg8] 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 [Asym-dimethyl Arg8] Antibody. Tissue: HeLa cells. Fixation: 0.5% PFA. Antigen retrieval: Not required. Primary antibody: Histone H3 [Asym-dimethyl Arg8] 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 [Asym-dimethyl Arg8] is nuclear and chromosomal. Staining: Histone H3 [Asym-dimethyl Arg8] is expressed in green and the nuclei and alpha-tubulin are counterstained with DAPI (blue) and DyLight 594 (red).