

Product datasheet for **TA354729**

H3FA (HIST1H3A) Rabbit Polyclonal Antibody

Product data:

| | |
|-------------------------|--|
| Product Type: | Primary Antibodies |
| Applications: | IF, IP |
| Recommended Dilution: | WB 0.1-1 µg/ml ELISA 0.01-0.1 µg/ml IP 2-5 µg/ml IHC 2-10 µg/ml FC 5-10 µg/ml |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | A synthetic peptide containing RT[Me3-K]QT in which Me3-K corresponds to trimethyl lysine 4 of human histone H3. |
| Formulation: | This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2) containing antibody stabilizer. |
| Purification: | The Rabbit IgG is purified by site-modified Epitope Affinity Purification. |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 17 kDa |
| Gene Name: | histone cluster 1, H3a |
| Database Link: | NP_003520 Entrez Gene 360198 MouseEntrez Gene 679994 RatEntrez Gene 8350 Human P68431 |



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Background:

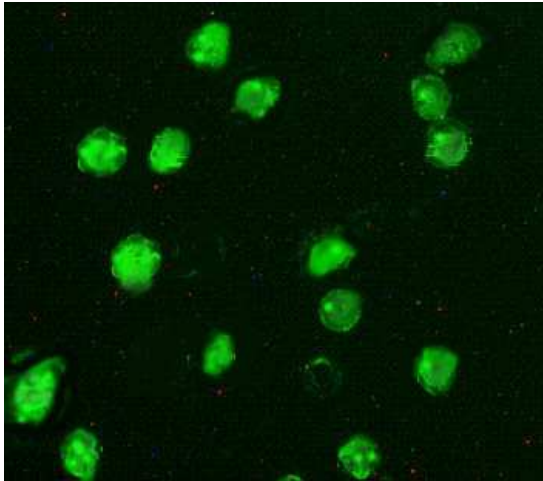
Histones are basic nuclear proteins that together with DNA make up the nucleosome structure in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The methylation of specific residues in the histone tails is a central modification for regulating epigenetic transitions in chromatin. Whereas methylation of histone H3 on lysine 4, 36, and 79 has been linked with gene activation, methylation of H3 on lysines 9, 27 and histone H4 on lysine 20 is associated with heterochromatin and some repressed genes with euchromatin. Modified lysine residues can exist in a mono-, di-, or tri-methylated state, while the arginine residues can be mono- or di-methylated. Histone H3 Lys4 trimethylation (H3-K4me3) is a conserved mark of actively transcribed chromatin. This antibody is specific for histone H3 tri-methylated at K4. The sequence is found in all mammals and a wide range of species, including *D. melanogaster*, *Arabidopsis*, Chicken and *Xenopus*. The antibody will react with any of the above species where the trimethylation modification is present.

Synonyms:

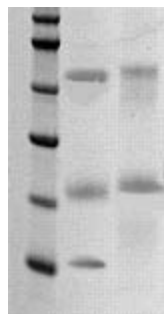
A; H3; H3FA

Protein Pathways:

Systemic lupus erythematosus

Product images:

IF: 3T3 cells were cultured in chamber, and fixed onto slide followed by incubation with Rb Anti-Trimethyl Histone H3 (K4) antibody, at 1:100 for 10 min at RT. FITC labeled Gt anti-Rb IgG was used for visualization under fluorescent microscope.



IP: The nuclear extract derived from 3T3 were immunoprecipitated by 4 ug of Rabbit anti-trimethyl Histone H3 (K4) and a rabbit IgG as a control (lane 2), then probed with Rb anti-Trimethyl Histone H3 (K4), at 1:1000. An immunoreactive band at ~17kDa is observed. Note: ~50 kDa and ~22 kDa are the rabbit immunoglobulin heavy and light chain