

## **Product datasheet for TA347147**

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OriGene Technologies, Inc.

## H3FA (HIST1H3A) Mouse Monoclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WB

**Recommended Dilution:** ChIP (1-2 µg per IP); Western blotting (1:1,000)

Reactivity: Human Mouse Isotype: IgG3

Clonality: Monoclonal

**Immunogen:** The immunogen for anti-H3 pan antibody: histone H3, using a KLH-conjugated synthetic

peptide containing an unmodified sequence from the C-terminus of the protein.

**Concentration:** lot specific

**Purification:** Protein A purified monoclonal antibody in PBS containing 0.05% azide.

**Conjugation:** Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** histone cluster 1, H3a

Database Link: NP 003520

Entrez Gene 8350 Human

P68431

**Background:** Histones are the main constituents of the protein part of chromosomes of eukaryotic cells.

They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histones play a central role in the regulation of transcription, DNA repair, DNA replication and chromosomal stability. These different functions are established via a complex set of post-translational modifications which either directly or indirectly alter chromatin structure and DNA accessibility to facilitate transcriptional activation or repression

or other nuclear processes.

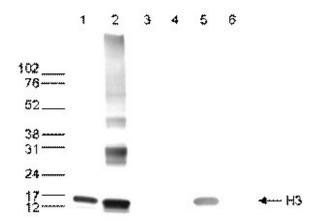
**Synonyms:** A; H3; H3FA



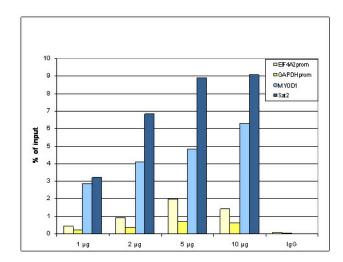


**Protein Pathways:** Systemic lupus erythematosus

## **Product images:**



WB was performed on whole cell (25 ug, lane 1) and histone extracts (15 ug, lane 2) from HeLa cells, and on 1 ug of recombinant histone H2A, H2B, H3 and H4 (lane 3, 4, 5 and 6, respectively) using the antibody against H3. The antibody was diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. The marker (in kDa) is shown on the left.



ChIP assays using HeLa cells: ChIP-seq" kit, using sheared chromatin from 1 million cells on the SX-8G IP-Star automated system. A titration of 1, 2, 5 and 10 ug ab was used. IgG (2 ug/IP) was negative IP control. qPCR was performed with primers for the promoters of the active GAPDH and EIF4A2 genes, and for the inactive MYOD1 gene and the Sat2 satellite repeat. Image shows the recovery, expressed as a % of input (the relative amount of IP'd DNA compared to input DNA after qPCR analysis).