

### **Product datasheet for TA347148**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## H3FA (HIST1H3A) Mouse Monoclonal Antibody

### **Product data:**

**Product Type:** Primary Antibodies

**Applications:** Dot, WB

Recommended Dilution: ChIP (1.5 μg); Dot blotting (1:300); Western blotting (1:1,000); Immunofluoresence (1:100)

Reactivity: Human
Host: Mouse
Isotype: IgG

Clonality: Monoclonal

Immunogen: The immunogen for anti-H3K27me2/3 antibody: histone H3, di- or trimethylated at lysine 27

(H3K27me2/3), using a KLH-conjugated synthetic peptide.

**Concentration:** lot specific

**Purification:** Protein G purified monoclonal antibody in PBS containing 0.05% azide and 0.05% ProClin

300.

**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. Histone tails undergo numerous post-translational modifications, which either directly or indirectly alter chromatin structure to facilitate transcriptional activation or repression or other nuclear processes. In addition to the genetic code, combinations of the different histone modifications reveal the so-called "histone code". Histone methylation and demethylation is dynamically regulated by respectively histone

methyl transferases and histone demethylases.

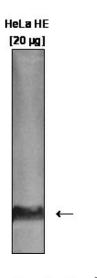




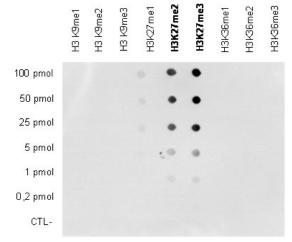
Synonyms: A; H3; H3FA

**Protein Pathways:** Systemic lupus erythematosus

# **Product images:**



HeLa HE [20 ug] HeLa HE [20 ug]WB using the antibody against H3K27me2/3 diluted 1:1,000 in TBS-Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right.



A Dot Blot analysis was performed to test the cross reactivity of the antibody against H3K27me2/3 with peptides containing other modifications of histone H3. Other modifications include mono-methylation of lysine 27 and mono-, di- and trimethylation of lysines 9 and 36. One hundred to 0.2 pmol of the peptide containing the respective histone modification were spotted on a membrane. The antibody was used at a dilution of 1:300.