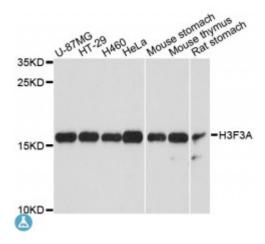


## **Anti-H3F3A Antibody**



**Description** Histones are basic nuclear proteins that are responsible for the nucleosome

structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. This gene contains introns and its mRNA is polyadenylated, unlike most histone genes. The protein encoded is a replication-independent member of the histone H3 family.

Model STJ115766

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1-136 of human H3F3A (NP\_002098.1).

**Gene ID** <u>3020</u>

Gene Symbol H3F3A

**Dilution range** WB 1:500 - 1:2000

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** Histone H3.3

Molecular Weight 15.328 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:4764OMIM:137800Reactome:R-HSA-201722

**Alternative Names** Histone H3.3

**Function** Variant histone H3 which replaces conventional H3 in a wide range of

nucleosomes in active genes, Constitutes the predominant form of histone H3 in non-dividing cells and is incorporated into chromatin independently of DNA synthesis, Deposited at sites of nucleosomal displacement throughout transcribed genes, suggesting that it represents an epigenetic imprint of transcriptionally active chromatin, Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template, Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability, DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histones and a real purplessome.

modifications of histones, also called histone code, and nucleosome

remodeling,

Cellular Localization Nucleus, Chromosome

Post-translational Modifications Acetylation is generally linked to gene activation, Acetylation on Lys-10 (H3K9ac) impairs methylation at Arg-9 (H3R8me2s), Acetylation on Lys-19 (H3K18ac) and Lys-24 (H3K24ac) favors methylation at Arg-18 (H3R17me), Acetylation at Lys-123 (H3K122ac) by EP300/p300 plays a central role in chromatin structure: localizes at the surface of the histone octamer and stimulates transcription, possibly by promoting nucleosome instability,

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