

Anti-Histone H3 pan, Rabbit Monoclonal Antibody

Rabbit Monoclonal Antibody

Catalog # ABV11835

Product Information

Application	WB, ICC, E
Primary Accession	P84243
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	15328

Additional Information

Gene ID	3020;3021
Positive Control	WB: A375, HEK293, HeLa and SK-MEL-2 whole cell lysates, ICC: Hela cells, ELISA: Hela cells
Application & Usage	Western Blot: 0.01 μ g/ml - 0.25 μ g/ml; ICC: 1 μ g/ml - 5 μ g/ml; ELISA: 0.2 μ g/ml - 1 μ g/ml; Multiplex: 0.1 μ g/ml - 0.5 μ g/ml
Alias Symbol	H3F3A
Other Names	H3F3A, H3.3A, H3F3, H3F3B, H3.3B
Appearance	Colorless liquid
Formulation	In 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-Histone H3 pan, Rabbit Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	H3-3A (HGNC:4764)
Synonyms	H3.3A, H3F3, H3F3A
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 histone code, and nucleosome remodeling.

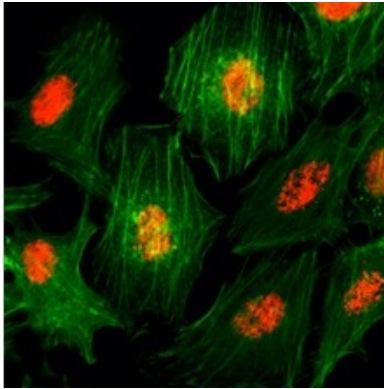
Cellular Location

Nucleus. Chromosome

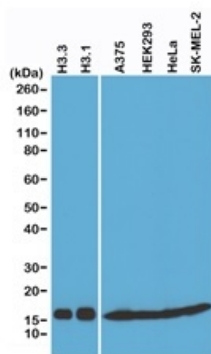
Background

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. 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.

Images



Immunocytochemistry of HeLa cells using Histone H3 Rabbit mAb (red). Actin filaments have been labeled with fluorescein phalloidin(green).



Western blot of recombinant Histone H3.3 and Histone H3.1 proteins, A375, HEK293, HeLa and SK-MEL-2 whole cell lysates, using Histone H3 pan mAb at 0.025 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.