Datasheet for ABIN3023254

anti-Histone 3 antibody (H3K4me3)

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Overview

Quantity:	100 µL
Target:	Histone 3 (H3)
Binding Specificity:	H3K4me3
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Chromatin Immunoprecipitation (ChIP), Immunoprecipitation (IP), Dot Blot (DB), ChIP DNA-Sequencing (ChIP-seq), Cleavage Under Targets and Release Using Nuclease (CUT&RUN), Cleavage Under Targets and Tagmentation (CUT&Tag)

Product Details

Immunogen:	A synthetic methylated peptide corresponding to residues surrounding K4 of human histone H3
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Methylated Antibodies
Purification:	Affinity purification

Target Details

Target:	Histone 3 (H3)

Target Details

Alternative Name:	Histone H3 (H3 Products)
Background:	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber 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 chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a replication-dependent histone that is a member of the histone H3 family. Transcripts from this gene lack polyA tails, instead, they contain a palindromic termination element. This gene is located separately from the other H3 genes that are in the histone gene cluster on chromosome 6p22-p21.3.,H3.4,H3/g,H3FT,H3t,HIST3H3,Histone H3,HIST1H3A,Signal Transduction,MAPK-Erk Signaling Pathway,MAPK-P38 Signaling Pathway,Epigenetics & Nuclear Signaling,Epigenetic Modifications,Methylation,Histone H3
Molecular Weight:	15 kDa
Gene ID:	8290
UniProt:	Q16695

Application Details

Application Notes:	DB,1:500 - 1:2000,WB,1:500 - 1:2000,IHC,1:50 - 1:200,IF,1:50 - 1:200,IP,1:50 - 1:200,ChIP,1:20 - 1:100,ChIP-seq,1:20 - 1:100
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid freeze / thaw cycles
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Publications

Product cited in:

Janssens, Wu, Sarthy, Meers, Myers, Olson, Ahmad, Henikoff: "Automated in situ chromatin profiling efficiently resolves cell types and gene regulatory programs." in: **Epigenetics & chromatin**, Vol. 11, Issue 1, pp. 74, (2019) (PubMed).

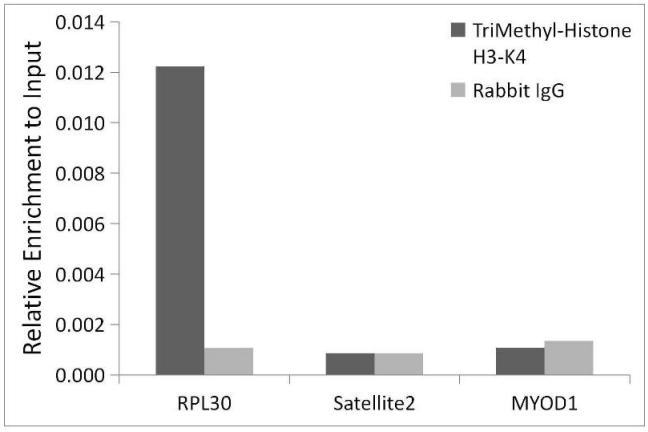
Sun, Ermann, Niu, Yan, Yang, Shi, Zou: "Histone demethylase LSD1 regulates bone mass by controlling WNT7B and BMP2 signaling in osteoblasts." in: **Bone research**, Vol. 6, pp. 14, (2018) (PubMed).

Yin, Jia, Miron, Long, Xu, Wei, Wu, Zhang, Li: "Setd7 and its contribution to Boron-induced bone regeneration in Boron-mesoporous bioactive glass scaffolds." in: **Acta biomaterialia**, Vol. 73, pp. 522-530, (2018) (PubMed).

Liu, Wang, Gao, Liu, Liu: "iTRAQ-Based Proteomic Analysis of Neonatal Kidney from Offspring of Protein Restricted Rats Reveals Abnormalities in Intraflagellar Transport Proteins." in: **Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology**, Vol. 44, Issue 1, pp. 185-199, (2018) (PubMed).

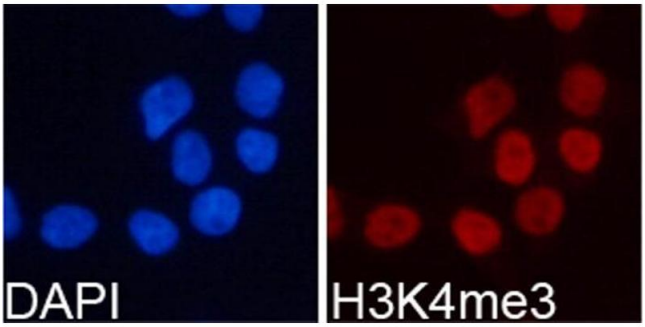
Yu, Liu, Liu, Wang, Liu, Miao, Du, Yang: "Ascorbic acid induces global epigenetic reprogramming to promote meiotic maturation and developmental competence of porcine oocytes." in: **Scientific reports**, Vol. 8, Issue 1, pp. 6132, (2018) (PubMed).

Images



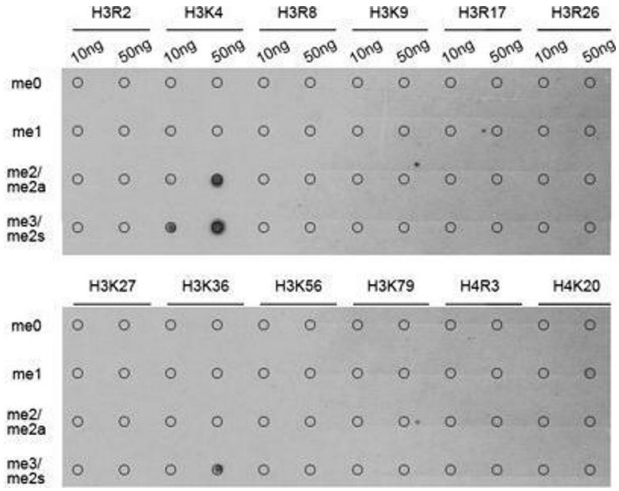
Chromatin Immunoprecipitation

Image 1. Chromatin immunoprecipitation analysis of extracts of HeLa cells, using H3K4me3 antibody (ABIN3023253, ABIN3023254, ABIN3023255, ABIN1513001 and ABIN6219512) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Immunofluorescence

Image 2. Immunofluorescence analysis of 293T cell using H3K4me3 antibody. Blue: DAPI for nuclear staining.



Dot Blot

Image 3.

Please check the product details page for more images. Overall 10 images are available for ABIN3023254.