

Datasheet for ABIN3023260

anti-Histone 3 antibody (H3K9me2)

18 Images

4 Publications

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Overview

Quantity:	100 µL
Target:	Histone 3 (H3)
Binding Specificity:	H3K9me2
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone 3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (IHC), Chromatin Immunoprecipitation (ChIP), Immunoprecipitation (IP), ChIP DNA-Sequencing (ChIP-seq)

Product Details

Immunogen:	A synthetic methylated peptide corresponding to residues surrounding K9 of human histone H3
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Methylated Antibodies
Purification:	Affinity purification

Target Details

Target:	Histone 3 (H3)
Alternative Name:	Histone H3 (H3 Products)

Target Details

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: WB,1:500 - 1:2000,IHC,1:50 - 1:200,IF,1:50 - 1:200,IP,1:50 - 1:200,ChIP,1:50 - 1:200,ChIP-seq,1:50 - 1:200

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

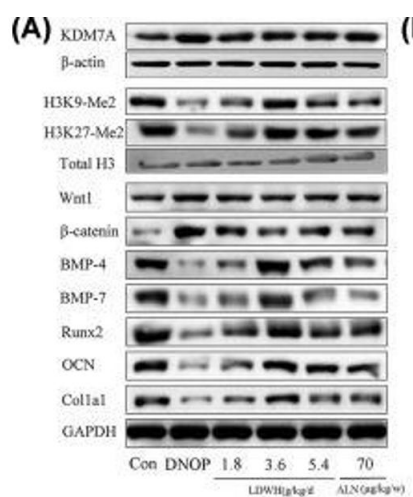
Storage Comment: Store at -20°C. Avoid freeze / thaw cycles.

Product cited in: Zuo, Rong, Li, Lv, Lan, Tong: "The histone methyltransferase SETD2 is required for expression of acrosin-binding protein 1 and protamines and essential for spermiogenesis in mice." in: **The Journal of biological chemistry**, Vol. 293, Issue 24, pp. 9188-9197, (2019) ([PubMed](#)).

Vaughan, Dickson, Whelihan, Johnstone, Cornett, Cheek, Ausherman, Cowles, Sun, Rothbart: "Chromatin structure and its chemical modifications regulate the ubiquitin ligase substrate selectivity of UHRF1." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 115, Issue 35, pp. 8775-8780, (2018) ([PubMed](#)).

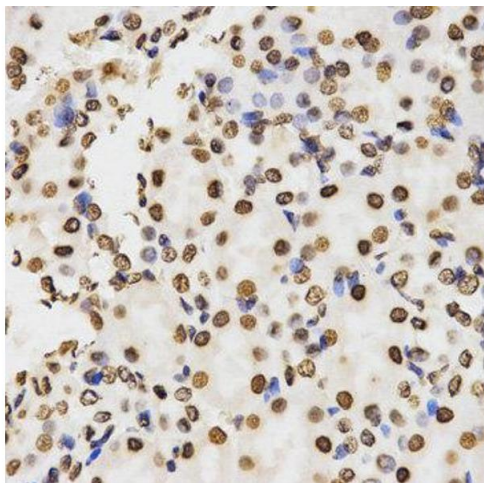
Cao, Liu, Yue, Liu, Pei, Gu, Wang, Jia: "Iron chelation inhibits cancer cell growth and modulates global histone methylation status in colorectal cancer." in: **Biometals : an international journal on the role of metal ions in biology, biochemistry, and medicine**, Vol. 31, Issue 5, pp. 797-805, (2018) ([PubMed](#)).

Zhao, Lei, Zhang, Zheng, Wang, Zhao, Li, Ye, Li, Wei, Wu: "Global histone modification profiling reveals the epigenomic dynamics during malignant transformation in a four-stage breast cancer model." in: **Clinical epigenetics**, Vol. 8, pp. 34, (2016) ([PubMed](#)).



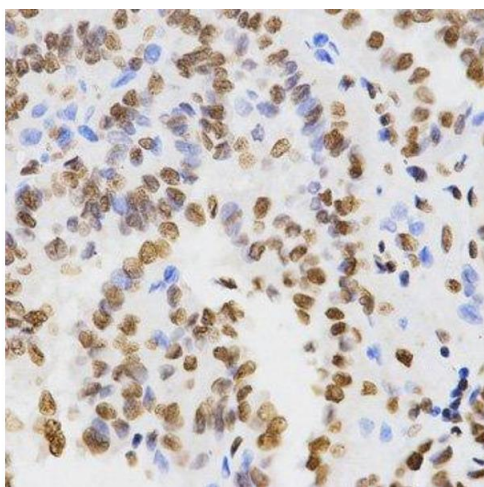
Western Blotting

Image 1. Effect of LWDH on KDM7A, Wnt1/β-catenin signaling, and osteoblast differentiation-related proteins expression of the femur tissue in DNOP rats(A and B) Western blot analysis for KDM7A, H3K9-Me2, H3K27-Me2, Wnt1, β-catenin, BMP-4, BMP-7, Runx2, OCN, and Col1a1 expression in the femur tissue of DNOP rats. Data are presented as mean ± SD (n=6). P<0.01 compared with the control group, *P<0.05, **P<0.01 compared with the DNOP group. - figure provided by CiteAb. Source: PMID32914833



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded mouse kidney tissue using H3K9me2 antibody at dilution of 1:200 (x400 lens).



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Immunohistochemistry of paraffin-embedded human thyroid cancer using DiMethyl-Histone H3-K9 antibody.

Please check the [product details page](#) for more images. Overall 18 images are available for ABIN3023260.