

ARG30246 CARM1 mediated histone arginine methylation Antibody Duo (H3R17me2a, H3R26me2a)

Package: 1 pair
Store at: -20°C

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG54785	anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody	Rabbit pAb	Hu, Ms, Rat	Dot, ICC/IF, IHC-P, WB	50 µl
ARG54793	anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody	Rabbit pAb	Hu	Dot, ICC/IF, WB	50 µl

Summary

Product Description	<p>Arginine methylation is a common posttranslational modification occurs in various proteins. In particular, histone arginine methylation has been shown to promote or prevent docking of key transcriptional effector molecules, hence exerting a regulatory effect based on the modification of histone code. CARM1 (PRMT4) specifically methylates histone H3 at H3R17me2a and H3R26me2a sites. H3R17me2a serves as transcription activation mark, while the function of H3R26me2a modification is still under studied. An interesting feature of the H3R26 site is its proximity to a major repressive mark, H3K27me3. Further studies on how H3R26me2a affects function of Polycomb repression will have to be performed.</p> <p>Lorenzo and Bedford. 2011. FEBS Lett 585(13): 2024 Wu and Xu. 2012. PNAS 109:5675 Messaoudi et al. 2006. PNAS 103:13351</p>
Target Name	CARM1 mediated histone arginine methylation
Alternate Names	CARM1 mediated histone arginine methylation antibody; Histone H3 dimethyl (Arg17) (asymmetric) antibody; Histone H3 dimethyl (Arg26) (asymmetric) antibody

Properties

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	HIST1H3J
Gene Full Name	Antibody Duo for CARM1 mediated histone arginine methylation
Background	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 is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq, Jul 2008]

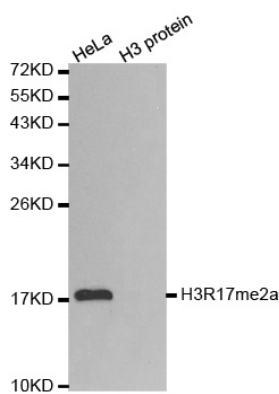
Function

Core component of nucleosome. 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. [UniProt]

Research Area

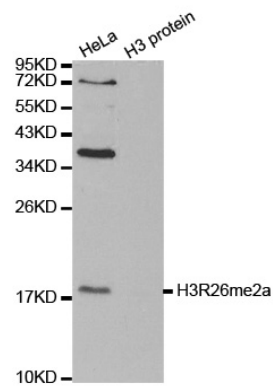
Gene Regulation antibody

Images



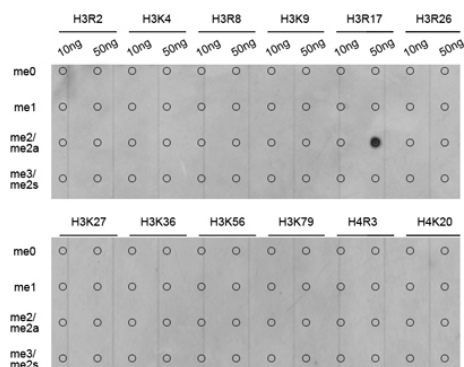
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody
WB image

Western Blot: extracts of HeLa cell line and H3 protein expressed in E.coli. stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody.



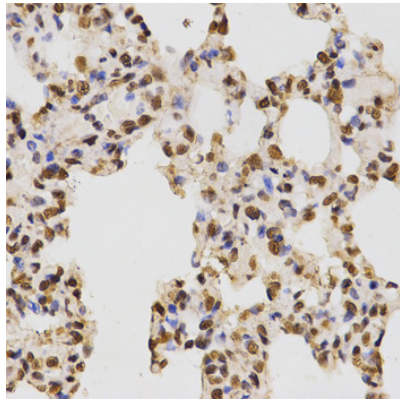
ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody
WB image

Western Blot: extracts of HeLa cell line and H3 protein expressed in E.coli. stained with ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody.



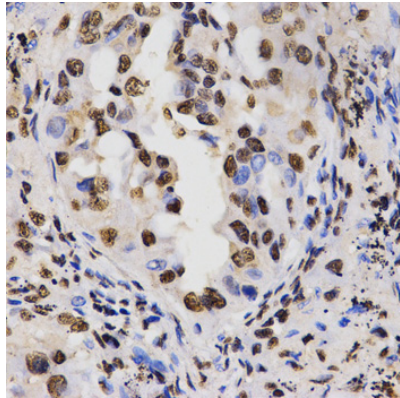
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody
Dot image

Dot-blot: all sorts of methylated peptides stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody.



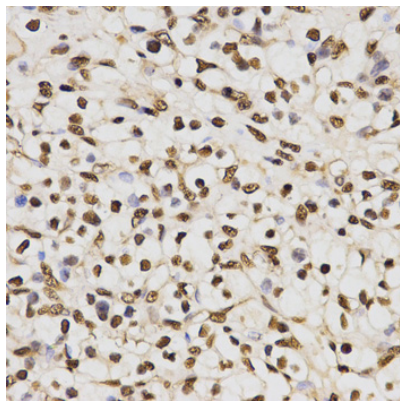
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody IHC image

Immunohistochemistry: paraffin-embedded rat lung tissue stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody at 1:200 dilution.



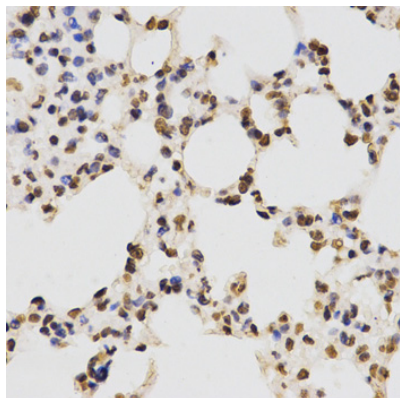
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody IHC image

Immunohistochemistry: paraffin-embedded human lung cancer tissue stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody at 1:200 dilution.



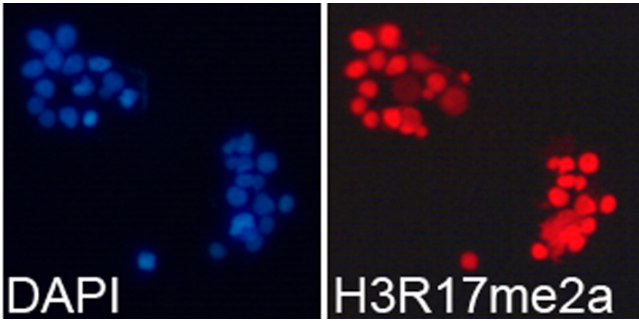
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody IHC image

Immunohistochemistry: paraffin-embedded human kidney cancer tissue stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody at 1:200 dilution.



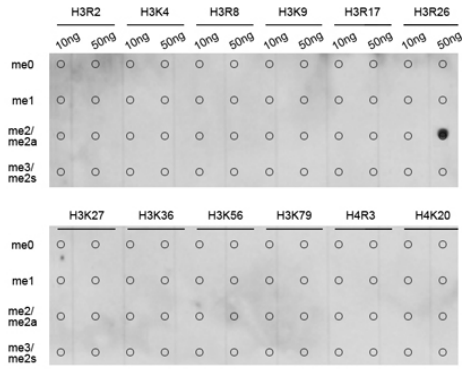
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody IHC image

Immunohistochemistry: paraffin-embedded mouse lung tissue stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody at 1:200 dilution.



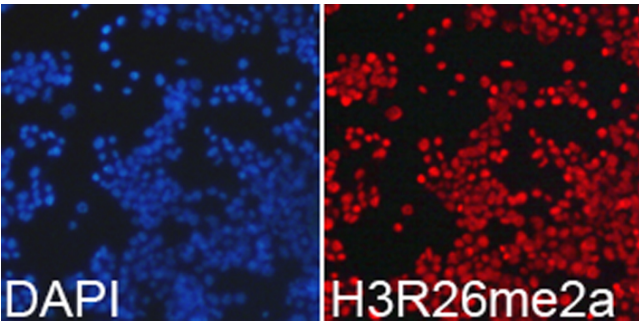
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody
ICC/IF image

Immunofluorescence: 293T cell stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody. Blue: DAPI for nuclear staining.



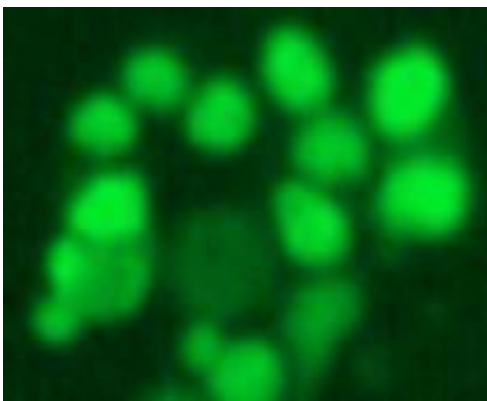
ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody
Dot image

Dot-blot: all sorts of methylated peptides stained with ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody.



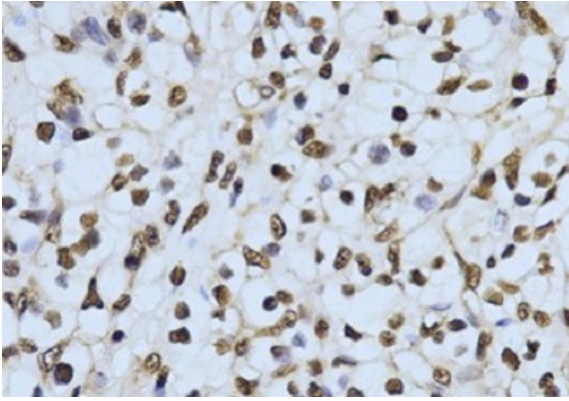
ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody
ICC/IF image

Immunofluorescence: 293T cell stained with ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody. Blue: DAPI for nuclear staining.



ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody
ICC/IF image

Immunofluorescence: 293T cells stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody.



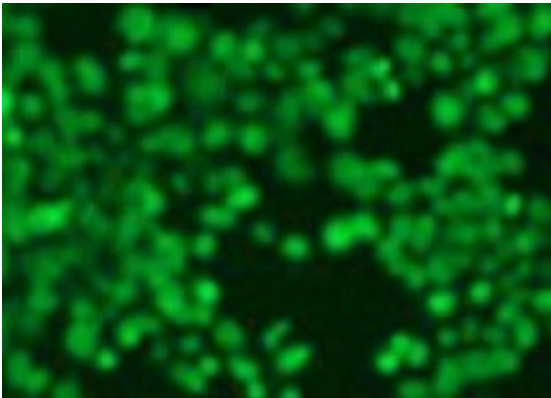
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human kidney cancer tissue stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody at 1:200 dilution.



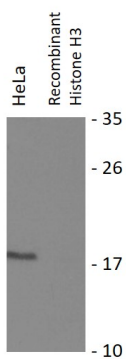
ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody WB image

Western blot: HeLa cell lysate and Recombinant Histone H3 protein expressed in E. coli (negative control) stained with ARG54785 anti-Histone H3 dimethyl (Arg17) (asymmetric) antibody.



ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody ICC/IF image

Immunofluorescence: 293T cells stained with ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody.



ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody WB image

Western blot: HeLa cell lysate and Recombinant Histone H3 protein expressed in E. coli (negative control) stained with ARG54793 anti-Histone H3 dimethyl (Arg26) (asymmetric) antibody.