

Histone H3R17 Methylation Antibody Panel Pack

Base Catalog # C10017

PACK CONTENTS

Component	Size	Shipping Temperature	Storage Upon Receipt	Storage Checklist
3R17M Histone H3R17 Monomethyl (H3R17me1) Polyclonal Antibody	25 µl	4°C	-20°C	
3R17A Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody	25 µl	4°C	-20°C	
3R17S Histone H3R17 Dimethyl Symmetric (H3R17me2s) Polyclonal Antibody	25 µl	4°C	-20°C	
HGR2 HRP-Goat Anti-Rabbit Secondary Antibody	50 µg	4°C	-20°C	

SHIPPING & STORAGE

This product is shipped on frozen ice packs at 4°C. Upon receipt: (1) Store all components at -20°C away from light.

All components are stable for 6 months from the date of shipment, when stored properly.

Histone H3R17 Monomethyl (H3R17me1) Polyclonal Antibody

Component Cat. #C10017-1-3R17M

Background

Modulation of chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of DNA wound around eight core histone proteins (two each of H2A, H2B, H3, and H4), is the primary building block of chromatin. The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination. These modifications occur in response to various stimuli and have a direct effect on the accessibility of chromatin to transcription factors and, therefore, gene expression. In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20. Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms. Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis. Phosphorylation at Thr3 of histone H3 is highly conserved among many species and is catalyzed by the kinase haspin. Immunostaining with phospho-specific antibodies in mammalian cells reveals mitotic phosphorylation at Thr3 of H3 in prophase and its dephosphorylation during anaphase.

Description

Histone H3R17 Monomethyl (H3R17me1) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

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

Specificity

Human, Mouse, Rat, Broad Range

Isotype

IgG

Uniprot ID

P68431

Purification

Affinity Purified

Immunogen

Synthetic Peptide of Human MonoMethyl-Histone H3-R17

Storage

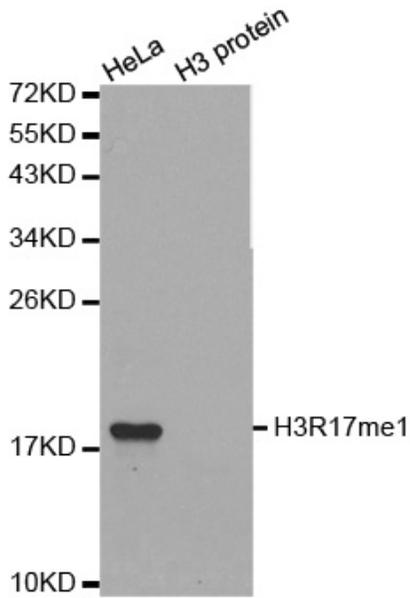
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

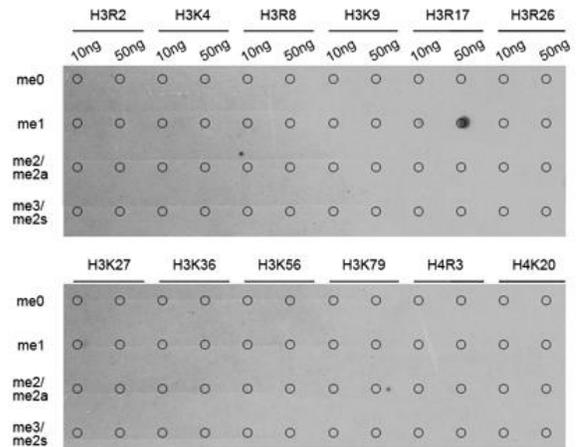
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Application

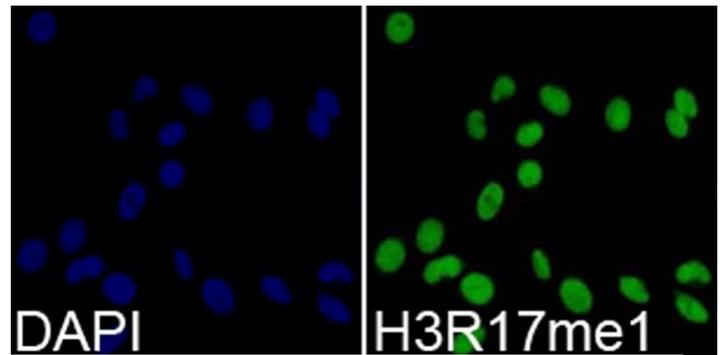
WB, IHC, IF, IP, ChIP, ChIPseq; Recommended dilution: WB 1:500 - 1:2000, IHC 1:50 - 1:200, IF 1:50 - 1:200, IP 1:50 - 1:200, ChIP 1:20 - 1:100, CHIPseq 1:20 - 1:100



Western blot analysis of extracts of HeLa cell line and H3 protein expressed in E.coli., using Histone H3R17 Monomethyl Polyclonal Antibody.



Dot-blot analysis of all sorts of methylation peptides using Histone H3R17 Monomethyl Polyclonal Antibody.



Immunofluorescence analysis of 293T cell using Histone H3R17 Monomethyl Polyclonal Antibody. Blue: DAPI for nuclear staining.

Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody

Component Cat. #C10017-1-3R17A

Background

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

Description

Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

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

Specificity

Human, Mouse, Rat, Broad Range

Isotype

IgG

Uniprot ID

P68431

Purification

Affinity Purified

Immunogen

Synthetic Peptide of Human Asymmetric DiMethyl-Histone H3-R17

Storage

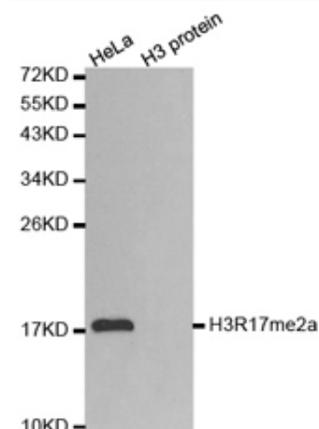
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

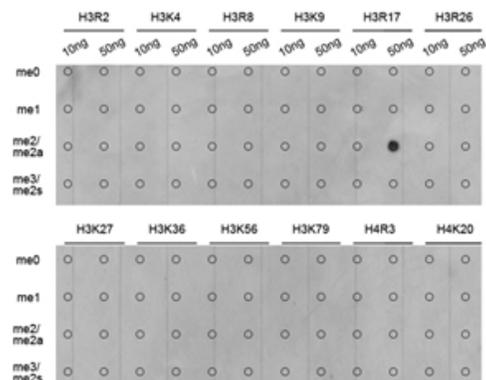
H3R17me2a, HIST1H3J, H3/j , H3FJ , Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h , Histone H3/l, Histone H3/j , Histone H3/k, Histone H3/l, H3 Arginine 17 me2a

Application

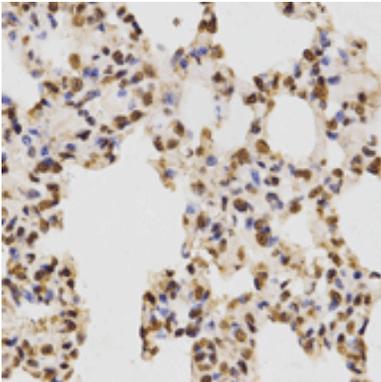
WB, IHC, IF, IP; Recommended dilution: WB 1:500 - 1:2000, IHC 1:50 - 1:200, IF 1:50 - 1:200 IP 1:50 - 1:200



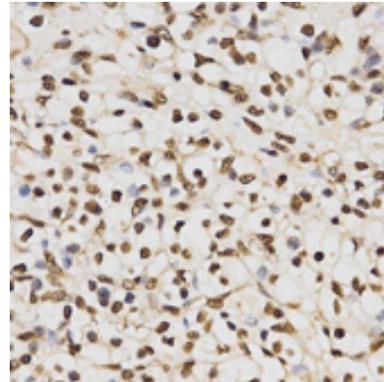
Western blot analysis of extracts of HeLa cell line and H3 protein expressed in E.coli., using Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody.



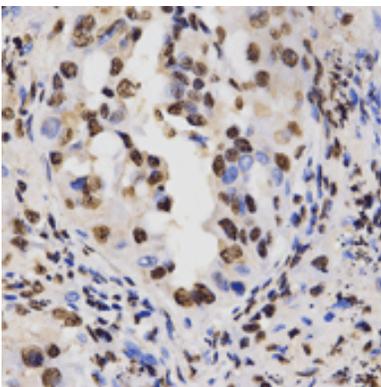
Dot-blot analysis of all sorts of methylation peptides using Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody.



Immunohistochemistry of paraffin-embedded rat lung tissue using Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody at dilution of 1:200 (x400 lens).



Immunohistochemistry of paraffin-embedded mouse lung tissue using Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody at dilution of 1:200 (x400 lens).



Immunohistochemistry of paraffin-embedded human lung cancer tissue using Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody at dilution of 1:200 (x400 lens).



Immunofluorescence analysis of 293T cell using Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody. Blue: DAPI for nuclear staining.

Histone H3R17 Dimethyl Symmetric (H3R17me2s) Polyclonal Antibody

Component Cat. #C10017-1-3R17S

Background

Modulation of chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of DNA wound around eight core histone proteins (two each of H2A, H2B, H3, and H4), is the primary building block of chromatin. The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination. These modifications occur in response to various stimuli and have a direct effect on the accessibility of chromatin to transcription factors and, therefore, gene expression. In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20. Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms. Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis. Phosphorylation at Thr3 of histone H3 is highly conserved among many species and is catalyzed by the kinase haspin. Immunostaining with phospho-specific antibodies in mammalian cells reveals mitotic phosphorylation at Thr3 of H3 in prophase and its dephosphorylation during anaphase.

Description

Histone H3R17 Dimethyl Symmetric (H3R17me2s) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

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

Specificity

Human, Mouse, Rat, Broad Range

Isotype

IgG

Uniprot ID

P68431

Purification

Affinity Purified

Immunogen

Synthetic Peptide of Human Symmetric DiMethyl-Histone H3-R17

Storage

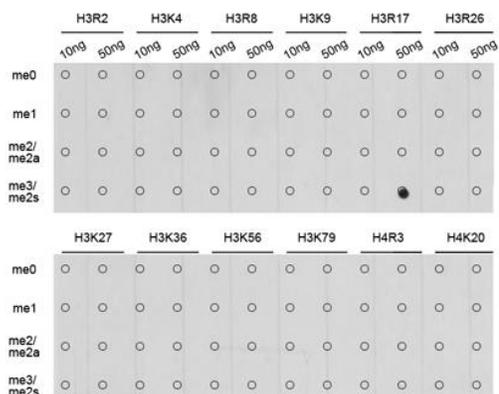
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

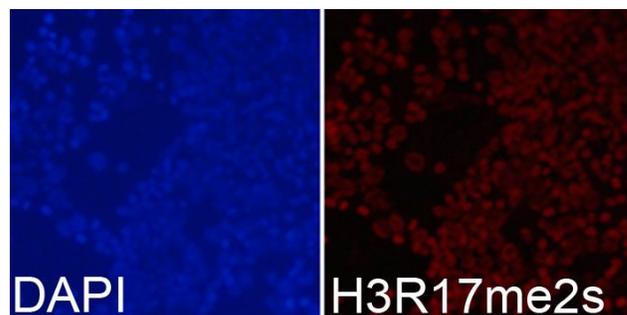
H3R17me2s, HIST1H3J, H3/j , H3FJ , Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h , Histone H3/l, Histone H3/j , Histone H3/k, Histone H3/l, H3 Arginine 17 me2s

Application

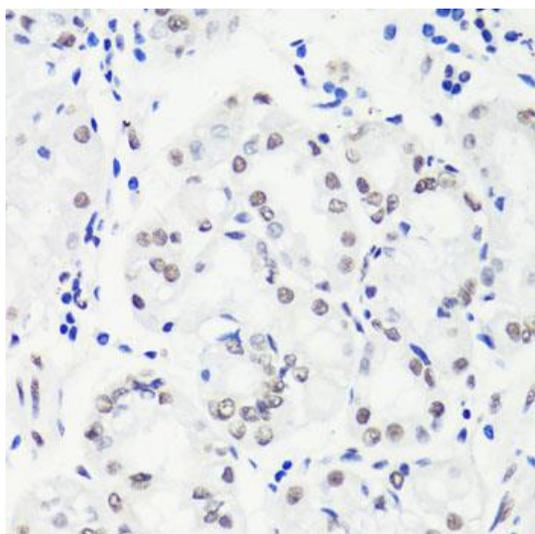
WB, IHC, IF; Recommended dilution: WB 1:500 - 1:2000, IHC 1:50 - 1:200, IF 1:50 - 1:200



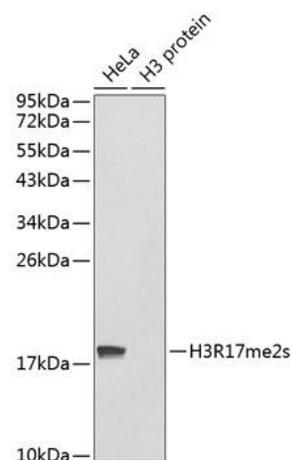
Dot-blot analysis of all sorts of methylation peptides using Symmetric DiMethyl-Histone H3-R17 antibody.



Immunofluorescence analysis of 293T cells using Symmetric DiMethyl-Histone H3-R17 antibody. Blue: DAPI for nuclear staining.



Immunohistochemistry of paraffin-embedded human stomach using H3R17me2s antibody at dilution of 1:100 (40x lens).



Western blot analysis of extracts of various cell lines, using Symmetric DiMethyl-Histone H3-R17 antibody. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST.

HRP- Goat Anti-Rabbit Secondary Antibody

Component Cat. #C10017-1-HGR2

Description

Goat anti-rabbit IgG recognizes rabbit IgG whole molecule. This secondary antibody was purified using antigen affinity chromatography. The antibody is conjugated with peroxidase.

Antibody Type

Polyclonal Antibody

Purification

Liquid; this product was prepared from monospecific antiserum by immunoaffinity chromatography, followed by solid phase adsorption(s) to remove any unwanted reactivities.

Immunogen

Rabbit IgG whole molecule

Isotype

IgG

Formulation

In 10 mM sodium phosphate, 75 mM NaCl, 50% (v/v) glycerol, pH 7.2.

Specificity

Rabbit

Storage

Store at -20°C. Aliquot to avoid repeated freezing and thawing.

Handling Recommendations

The optimal working dilution should be determined by the end user. For maximum recovery of the products, centrifuge the vial prior to opening the cap.

Applications & Suggested Dilutions

Western Blot: 1:1000-1: 10000; Immunohistochemistry: 1:100-1:500; Immunofluorescence: 1:100-1:500; ELISA: 1:2000-1:20000

RELATED PRODUCTS

Histone Modification Antibodies

A-3710	Histone H3R17 Monomethyl (H3R17me1) Polyclonal Antibody
A-3709	Histone H3R17 Dimethyl Asymmetric (H3R17me2a) Polyclonal Antibody
A-3711	Histone H3R17 Dimethyl Symmetric (H3R17me2s) Polyclonal Antibody
A12004	HRP-Goat Anti-Rabbit Secondary Antibody

Histone Modification Panel Packs

C10000	Histone H3 Methylation Antibody Panel Pack I – Active Genes
C10001	Histone H3 Methylation Antibody Panel Pack I – Repression Genes
C10002	Histone H3 Methylation Antibody Panel Pack II – Active Genes
C10003	Histone H3 Methylation Antibody Panel Pack II – Repression Genes
C10004	Histone H3 Methylation Antibody Panel Pack III – Active Genes
C10005	Histone H3K4 Methylation Antibody Panel Pack
C10006	Histone H3K9 Methylation Antibody Panel Pack
C10007	Histone H3K27 Methylation Antibody Panel Pack
C10008	Histone H3K36 Methylation Antibody Panel Pack
C10009	Histone H3K79 Methylation Antibody Panel Pack
C10010	Histone H3 Acetylation Antibody Panel Pack I
C10011	Histone H3 Acetylation Antibody Panel Pack II
C10012	Histone H4K20 Methylation Antibody Panel Pack
C10013	Histone H4 Acetylation Antibody Panel Pack
C10014	Histone H3 Phosphorylation Antibody Panel Pack
C10015	Histone H3R2 Methylation Antibody Panel Pack
C10016	Histone H3R8 Methylation Antibody Panel Pack
C10017	Histone H3R17 Methylation Antibody Panel Pack
C10018	Histone H3R26 Methylation Antibody Panel Pack
C10019	Histone H4R3 Methylation Antibody Panel Pack