

Histone H3 Acetylation Antibody Panel Pack I

Base Catalog # C10010

PACK CONTENTS

Component	Size	Shipping Temperature	Storage Upon Receipt	Storage Checklist
3K9A Histone H3K9ac (Acetyl H3K9) Polyclonal Antibody	25 µl	4°C	–20°C	
3K14A Histone H3K14ac (Acetyl H3K14) Polyclonal Antibody	25 µl	4°C	–20°C	
3K18A Histone H3K18ac (Acetyl H3K18) Polyclonal Antibody	25 µl	4°C	–20°C	
3K27A Histone H3K27ac (Acetyl H3K27) 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 **3K9**, **3K14A**, **3K18A**, **3K27A**, and at **HGR2** –20°C away from light.

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

Histone H3K9ac (Acetyl H3K9) Polyclonal Antibody

Component Catalog #C10010-3K9A

Background

Histone H3- along with H2A, H2B and H4- is involved in the structure of chromatin in eukaryotic cells. Histone H3 can undergo several different types of epigenetic modifications that influence cellular processes. These modifications including acetylation, phosphorylation, methylation, ubiquitination, and ADP-ribosylation occur on the N-terminal tail domains of histone H3, which results in remodeling of the nucleosome structure into an open conformation more accessible to transcription complexes. In most species, histone H3 is primarily acetylated at lysine 9, 14, 18, and 23.

Description

Histone H3K9ac (Acetyl H3K9) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation:

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3.

Specificity

Broad Range, Human, Mouse, Rat

Isotype

IgG

Uniprot ID

Q16695

Purification

Affinity Purified

Immunogen

A synthetic acetylated peptide around K9 of human Histone H3 (NP_003520.1).

Storage

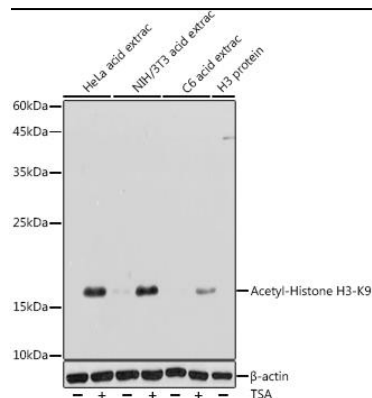
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

H3K9ac antibody, H3K9a antibody

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 - 1:50

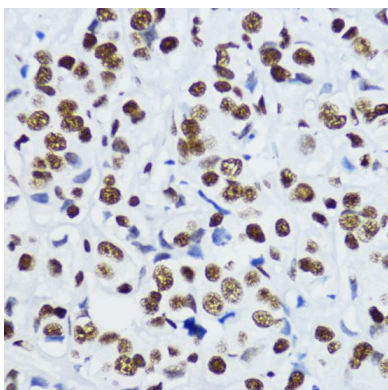


Western blot analysis of extracts of various cell lines, using Acetyl-Histone H3-K9 antibody at 1:1000 dilution.

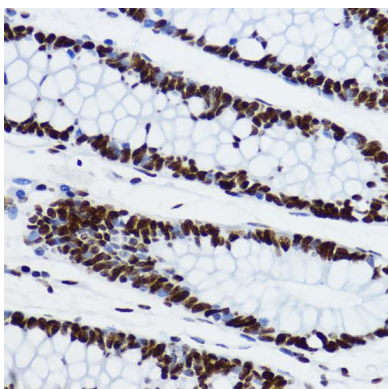
HeLa acid extract and NIH/3T3 acid extract and C6 acid extract were treated by TSA (1 uM) at 37°C for 18 hours. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

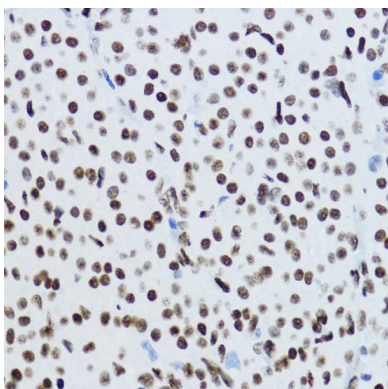
Blocking buffer: 3% nonfat dry milk in TBST.



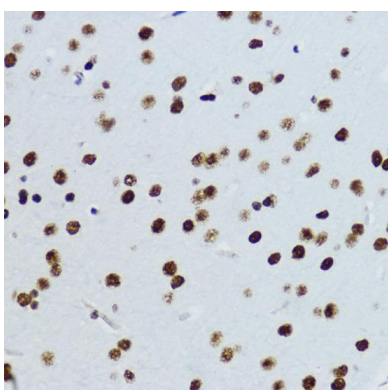
IHC of paraffin-embedded human mammary cancer using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



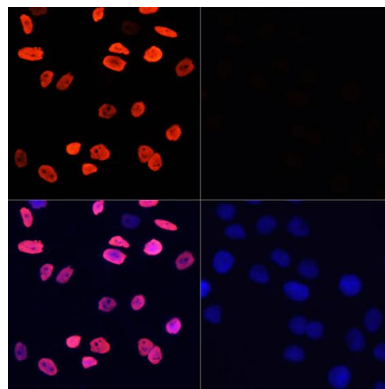
IHC of paraffin-embedded human colon using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



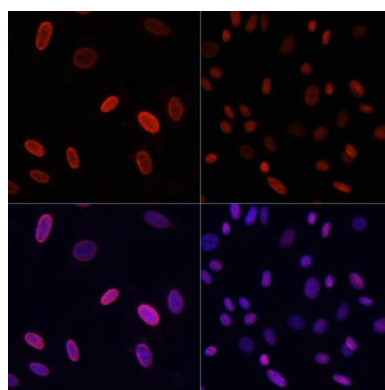
IHC of paraffin-embedded rat ovary using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



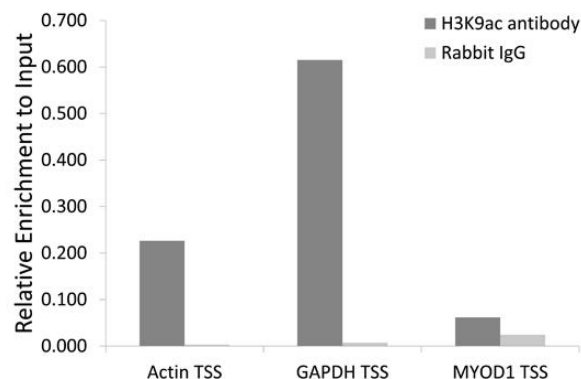
IHC of paraffin-embedded mouse brain using Acetyl-Histone H3-K9 antibody at dilution of 1:200 (40x lens).



IF analysis of HeLa cells using Acetyl-Histone H3-K9 antibody at dilution of 1:100 (40x lens). HeLa cells were treated by TSA (1 μ M) at 37 degrees Celsius for 18 hours (left). Blue: DAPI for nuclear staining.



IF analysis of NIH/3T3 cells using Acetyl-Histone H3-K9 antibody at dilution of 1:100 (40x lens). NIH/3T3 cells were treated by TSA (1 μ M) at 37 degrees Celsius for 18 hours (left). Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of 293 cell line, using H3K9ac antibody 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.

Histone H3K14ac (Acetyl H3K14) Polyclonal Antibody

Component Catalog #C10010-3K14A

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 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.

Description

Histone H3K14ac (Acetyl H3K14) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

Specificity

Human, Mouse, Rat

Isotype

IgG

Uniprot ID

P68431, Q71DI3, P84243

Purification

Affinity Purified

Immunogen

Synthesized peptide derived from Human Histone H3 around the acetylation site of K14.

Storage

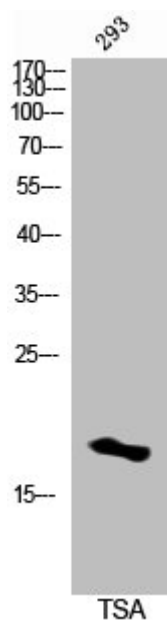
Shipped at 4°C. Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Alternative Names

H3K14ac antibody; H3K14a antibody; H3t; H3.4; H3/g; H3FT

Application

WB, IF, ELISA; Recommended dilution: WB 1:500-1:2000, IF 1:200-1:1000, ELISA 1:5000



Western Blot analysis of 3T3 cells using Histone H3K14ac Polyclonal Antibody

Histone H3K18ac (Acetyl H3K18) Polyclonal Antibody

Component Catalog #C10010-3K18A

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 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.

Description

Histone H3K18ac (Acetyl H3K18) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

Buffer: PBS with 0.05% proclin300, 50% glycerol, pH7.3

Specificity

Broad Range, Mouse, Rat, Human

Isotype

IgG

Purification

Affinity Purified

Immunogen

A synthetic acetylated peptide around K9 of human Histone H3 (NP_003520.1).

Storage

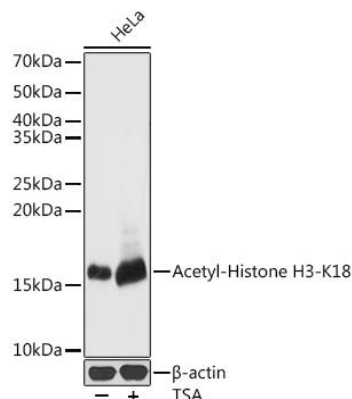
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

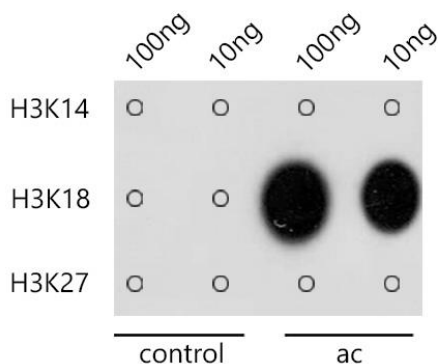
H3K18ac antibody; H3K18a antibody; H3t; H3.4; H3/g; H3FT

Application

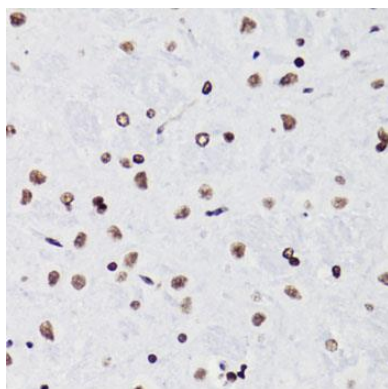
WB, IHC, IF/ICC, IP, ChIP, ChIPseq; Recommended dilution: WB 1:100 - 1:500, IHC 1:200 - 1:500, IF/ICC 1:500 - 1:1000, IP 1:200 - 1:500, ChIP 1:50 - 1:100, ChIP-seq 1:50 - 1:100



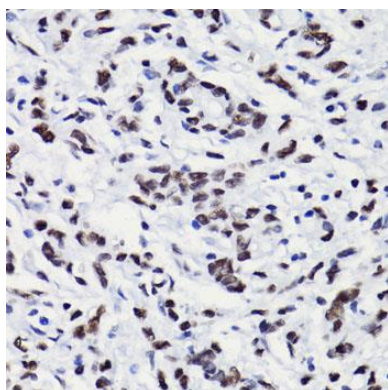
Western blot analysis of extracts of HeLa cells, using Acetyl-Histone H3-K18 antibody at 1:500 dilution. HeLa cells were treated by TSA (1 μ M) at 37°C for 18 hours. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST.



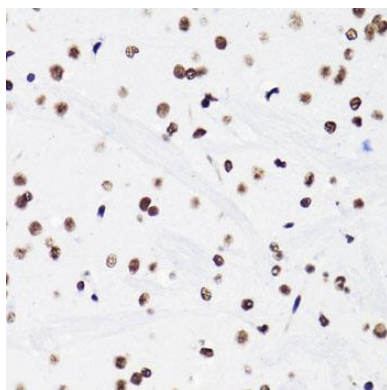
Dot-blot analysis of all sorts of methylation peptides using Acetyl-Histone H3-K18 antibody at 1:1000 dilution.



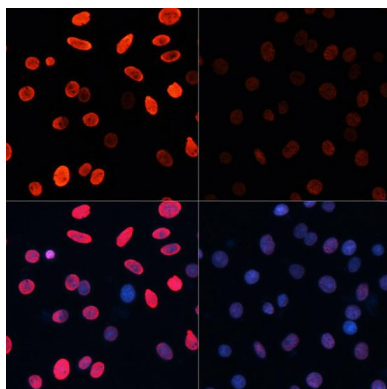
Immunohistochemistry of paraffin-embedded rat brain using H3K18ac antibody at dilution of 1:100 (40x lens).



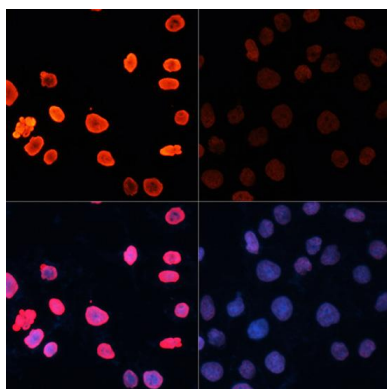
Immunohistochemistry of paraffin-embedded human gastric cancer using H3K18ac antibody at dilution of 1:100 (40x lens).



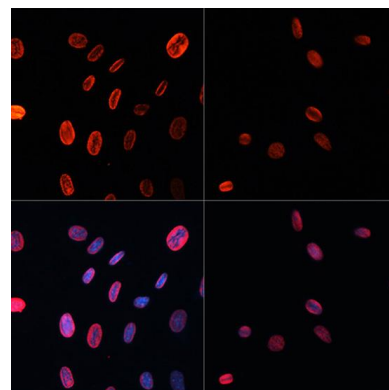
Immunohistochemistry of paraffin-embedded mouse brain using H3K18ac antibody at dilution of 1:100 (40x lens).



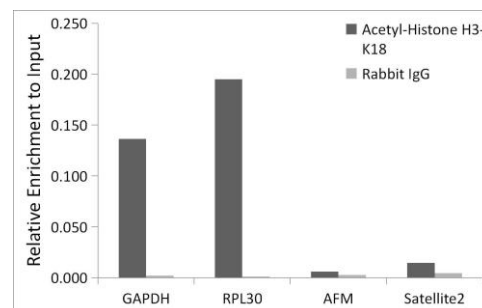
Immunofluorescence analysis of C6 cells using Acetyl-Histone H3-K18 antibody at dilution of 1:100. C6 cells were treated by TSA (1 uM) at 37 degrees Celsius for 18 hours. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using Acetyl-Histone H3-K18 antibody at dilution of 1:100. HeLa cells were treated by TSA (1 uM) at 37 degrees Celsius for 18 hours. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using Acetyl-Histone H3-K18 antibody at dilution of 1:100. NIH/3T3 cells were treated by TSA (1 uM) at 37 degrees Celsius for 18 hours. Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of HCT116 cells, using Acetyl-Histone H3-K18 Rabbit pAb antibody 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.

Histone H3K27ac (Acetyl H3K27) Polyclonal Antibody

Component Catalog #C10010-3K27A

Histones are proteins found in eukaryotic cell nuclei that package and order the DNA into structural units called nucleosomes. Nucleosomes consist of about 146-147 bp of DNA wrapped around an octamer of histone proteins (histone 2A, histone 2B, histone 3, and histone 4). The N-terminal tails of histones protrude from the globular nucleosome core and can undergo several different types of epigenetic modifications that influence cellular processes. The interaction of a linker histone, H1, with DNA between nucleosomes, facilitates the compaction of chromatin into higher-order structures. This gene is without introns and encodes a histone H3 family member. Transcripts from this gene are missing a polyA tail. As an alternative, they contain palindromic termination elements. This gene is located independently from the other H3 genes. Most H3 genes are found in the histone gene cluster on chromosome 6p22-p21. 3.

Description

Histone H3K27ac (Acetyl H3K27) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Specificity

Broad Range, Human, Mouse, Rat

Formulation

PBS with 0.05% proclin300, 50% glycerol, pH7.3.

Isotype

IgG

Uniprot ID

P68431

Purification

Affinity Purified

Immunogen

A synthetic acetylated peptide around K27 of human Histone H3 (NP_003520.1).

Storage

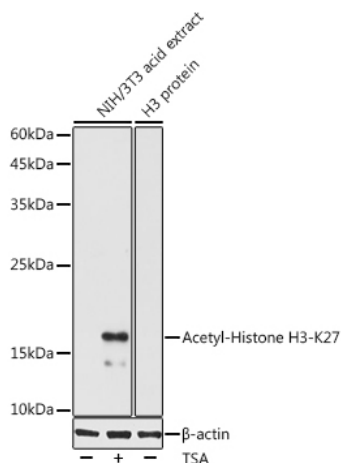
Shipped at 4°C. Store at -20°C. Avoid multiple freeze/thaw cycles.

Alternative Names

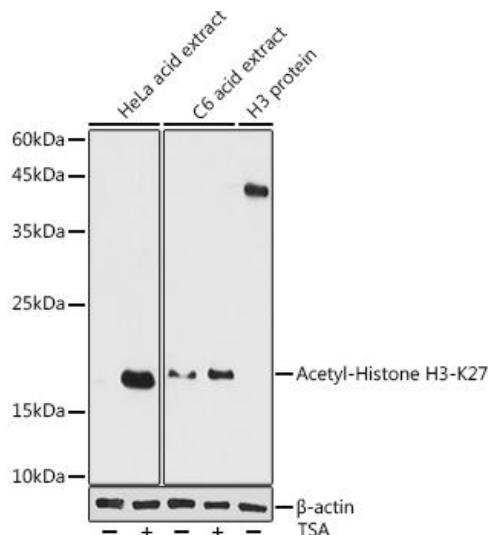
H3t, H3.4, H3/g, H3FT, H3K27ac

Application

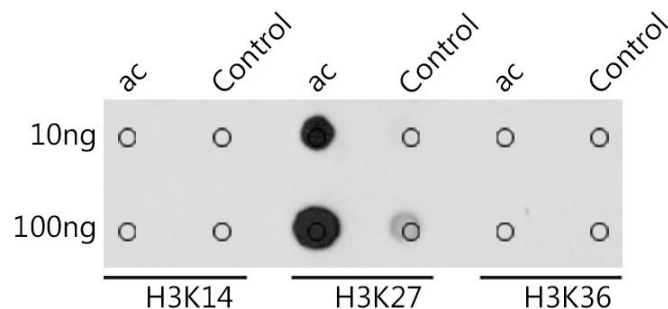
WB, ChIP, ELISA, DB: Recommended dilution, WB 1:500 - 1:1000, ChIP 1:50 - 1:200, DB 1:500 - 1:1000



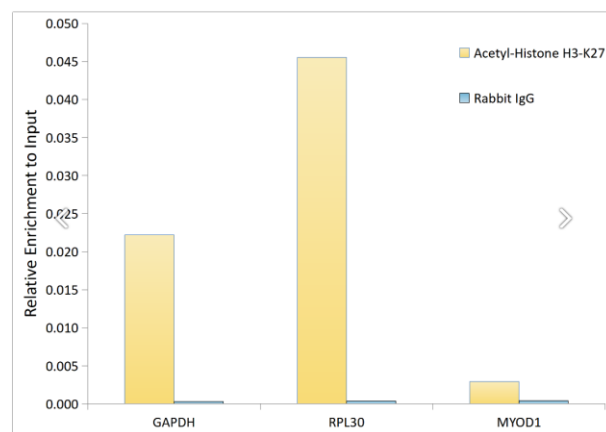
Western blot analysis of extracts of various cell lines, using Acetyl-Histone H3-K27 antibody at 1:1000 dilution. NIH/3T3 cells were treated by TSA (1 μ M) at 37°C for 18 hours. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST.



Western blot analysis of extracts of various cell lines, using Acetyl-Histone H3-K27 antibody at 1:1000 dilution. HeLa cells and C6 cells were treated by TSA (1 μ M) at 37°C for 18 hours. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST.



Western blot analysis of extracts of various cell lines, using Acetyl-Histone H3-K27 antibody at 1:1000 dilution. HeLa cells and C6 cells were treated by TSA (1 μ M) at 37°C for 18 hours. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Acetyl-Histone H3-K27 Rabbit pAb antibody 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.

HRP-Goat Anti-Rabbit Secondary Antibody

Component Catalog #C10010-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-4022	Histone H3K9ac (Acetyl H3K9) Polyclonal Antibody
A-4023	Histone H3K14ac (Acetyl H3K14) Polyclonal Antibody
A-4024	Histone H3K18ac (Acetyl H3K18) Polyclonal Antibody
A-4708	Histone H3K27ac (Acetyl H3K27) 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