

# Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody

(Catalog # A-4042)

## 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.

## Description

Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

**Formulation** Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

**Specificity** Broad Range, Mouse, Rat, Human

**Isotype** IgG

**Uniprot ID** Q16695/P68431

Purification Affinity Purified

## Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human histone H3 (NP\_003520.1).

#### Storage

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

#### Application

WB, IHC, IF/ICC, ChIP, ChIPseq, DB, ELISA; Recommended dilution: WB 1:500 - 1:1000, IHC 1:50 - 1:200, IF/ICC 1:50 - 1:200, ChIP 5µg antibody for 5µg-10µg of Chromatin, CHIPseq 1:20 - 1:100, DB 1:500 - 1:2000, ELISA - recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.



Western blot analysis of various lysates, using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody at 1:400 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) at 1:10000 dilution.

Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST.

Exposure time: 60s.

	10ng	100ng	10ng	100ng	10ng	100ng	10ng	100nc
H3K4	0	0	0	0	0	0	0	0
H3K9	0	0	0	0	0	0	0	0
H3K27	0	0	0	0	ο	0	0	0
H3K36	•	•	0	0	0	0	0	0
H3K79	0	0	0	0	0	0	0	0
	me3		me2		me1		me0	

Dot-blot analysis of all sorts of methylation peptides using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody.



Immunohistochemistry analysis of paraffin-embedded Human lung using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human spleen using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse lung using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat lung using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunofluorescence analysis of 293T cells using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody. Blue: DAPI for nuclear staining.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal 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.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Histone H3K36me3 (H3K36 Trimethyl) Polyclonal 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.



Chromatin immunoprecipitation was performed with 5 µg of cross-linked chromatin from HeLa cells, using 5 µg of Histone H3K36me3 (H3K36 Trimethyl) Polyclonal Antibody and Rabbit IgG isotype control. The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.