

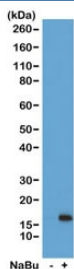
## H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody [clone RM154] (R20205)

Catalog No.	Formulation	Size
R20205-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug
R20205-25UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	25 ug

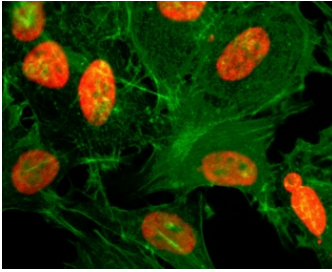
Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

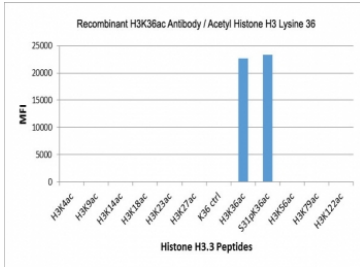
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Recombinant Rabbit Monoclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Name</b>	RM154
<b>Purity</b>	Protein A purified from animal origin-free supernatant
<b>UniProt</b>	P84243
<b>Gene ID</b>	8350
<b>Applications</b>	Western Blot : 0.5-2ug/ml Immunocytochemistry : 0.5-2ug/ml ELISA : 0.2-1ug/ml
<b>Limitations</b>	This recombinant H3K36ac antibody is available for research use only.



H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody (clone RM154) for WB. Western blot analysis of HIST1H3A / Histone H3 Lys36 acetylation in acid extracts of human HeLa cells untreated (-) and sodium butyrate-treated (+) using H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody. A band is detected at the predicted molecular weight of approximately 15 kDa corresponding to acetylated Histone H3, with increased signal in treated cells consistent with histone deacetylase inhibition and enhanced transcription-associated chromatin within gene bodies.



ICC testing of HeLa cells treated with sodium butyrate using the recombinant H3K36ac antibody (red). Actin filaments have been labeled with fluorescein phalloidin (green).



H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody (clone RM154) specificity analysis. Peptide binding assay demonstrating selective recognition of HIST1H3A / Histone H3 Lys36 acetylation (K36ac). Strong signal is observed exclusively with the K36ac peptide, including the S31pK36ac dual-modified peptide, indicating that recognition is not affected by phosphorylation at neighboring Ser31. No detectable reactivity is observed with unmodified Histone H3 or acetylation at Lys4, Lys9, Lys14, Lys18, Lys23, Lys27, Lys56, Lys79, or Lys122, confirming high specificity for the Lys36 acetylation site.

## Description

Histone H3 (HIST1H3A) acetylation at lysine 36 represents a key modification associated with transcription elongation and gene body chromatin organization. H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody (clone RM154) is designed to detect Histone H3 acetylated at lysine 36, providing a specific marker of actively transcribed gene regions beyond promoter initiation. This antibody is part of a broader collection of [Histone H3 antibodies](#) used to study chromatin structure, histone modifications, and epigenetic regulation.

HIST1H3A antibody, also referred to as Histone H3 antibody and H3K36ac antibody in the literature, recognizes a modification enriched within the coding regions of genes undergoing active transcription. Unlike promoter-associated acetylation such as H3K9ac or enhancer-associated marks such as H3K27ac, H3K36 acetylation is closely linked to transcription elongation and RNA polymerase II progression along gene bodies.

This recombinant rabbit monoclonal clone RM154 antibody is uniquely positioned for studies of transcriptional elongation rather than transcription initiation or chromatin accessibility. H3K36ac provides insight into the later stages of gene expression, reflecting ongoing transcriptional activity across coding regions rather than regulatory activation at promoters or enhancers.

At the molecular level, H3K36 acetylation contributes to chromatin states that facilitate efficient elongation by maintaining nucleosome flexibility and enabling passage of transcriptional machinery. It is also associated with recruitment of factors involved in RNA processing and chromatin maintenance during transcription.

H3K36 acetylation exists alongside H3K36 methylation, but represents a distinct regulatory state associated with dynamic chromatin remodeling. The acetylated form provides additional resolution in distinguishing actively transcribed chromatin from other gene-associated states.

In western blot applications, the antibody detects Histone H3 at approximately 15 kDa, with signal corresponding to acetylated chromatin within gene bodies of actively transcribed genes. Detection reflects elongation-associated chromatin states rather than promoter activation alone.

At the cellular level, H3K36 acetylation localizes to the nucleus and is enriched in euchromatic regions corresponding to gene bodies of actively expressed genes. This distribution distinguishes it from promoter-restricted and enhancer-restricted acetylation marks.

This antibody supports detection of Lys36-acetylated Histone H3, enabling investigation of transcription elongation, gene

body chromatin organization, and epigenetic regulation of transcriptional progression.

## Application Notes

The stated application concentrations are suggested starting points. Titration of the H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

An acetyl-peptide corresponding to the Acetyl-Histone H3 (Lys36) was used as the immunogen for this H3K36ac Antibody / HIST1H3A Transcription Elongation Marker Antibody.

## Storage

Store the recombinant H3K36ac antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).

## Alternate Names

Histone H3 Lys36 acetylation antibody, H3K36ac elongation marker antibody, histone H3 acetyl Lys36 antibody, gene body acetylation antibody