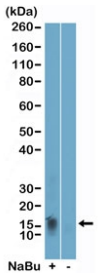
H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody [clone RM456] (R20470)

Catalog No.	Formulation	Size
R20470-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug

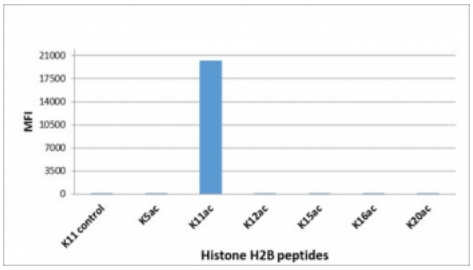
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM456
Purity	Protein A purified from animal origin-free supernatant
UniProt	P62807
Applications	Western blot: 0.001ug/ml-0.01ug/ml ELISA: 0.2ug/ml-1ug/ml
Limitations	This H2BK11ac antibody is available for research use only.



H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody (clone RM456) for WB. Western blot analysis of HIST1H2B / Histone H2B Lys11 acetylation (H2BK11ac) in acid extracts of human HeLa cells untreated (-) or treated (+) with sodium butyrate using H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody. A band is detected at the predicted molecular weight corresponding to acetylated Histone H2B, with increased signal in treated cells consistent with enhanced histone acetylation and transcription-associated chromatin regulation following HDAC inhibition.



H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody (clone RM456) specificity analysis. Peptide binding assay demonstrating selective recognition of HIST1H2B / Histone H2B Lys11 acetylation (K11ac). Strong signal is observed exclusively with the K11ac peptide, while no detectable reactivity is seen with non-modified Lys11 or other acetylated histone H2B peptides, confirming high specificity for the Lys11-acetylated H2B state associated with transcriptional regulation and active chromatin.

Description

Histone H2B (HIST1H2B) acetylation at lysine 11 is a chromatin modification associated with transcriptional regulation, chromatin accessibility, and sustained gene expression. H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody (clone RM456) is designed to detect Histone H2B acetylated at lysine 11, providing a marker of actively regulated chromatin regions. This antibody is part of a broader collection of Histone H2B antibodies used to study chromatin structure, histone modifications, and epigenetic regulation.

HIST1H2B antibody, also referred to as Histone H2B antibody and H2BK11ac antibody in the literature, recognizes a modification that contributes to modulation of nucleosome structure and transcriptional output. Acetylation at lysine 11 reduces histone-DNA interaction strength and supports recruitment of transcriptional machinery.

This recombinant rabbit monoclonal clone RM456 antibody is uniquely positioned for studies of transcriptional regulation and chromatin dynamics. H2B lysine 11 acetylation is enriched in active chromatin regions and is associated with both promoter and gene body chromatin involved in transcriptional progression.

At the molecular level, H2BK11ac supports chromatin environments that facilitate transcription factor binding and RNA polymerase II activity. It may also participate in combinatorial histone modification patterns that define transcriptional output and gene expression levels.

This modification reflects a more sustained and stabilized transcriptional state compared to early activation marks such as H2BK5ac. It is often present in chromatin regions undergoing continuous transcription rather than transient activation.

Unlike phosphorylation marks such as H2B pS14, which are associated with apoptosis and chromatin condensation, H2BK11ac is linked to active chromatin and gene expression. It represents a regulatory modification that supports ongoing transcription rather than signaling cellular stress or death.

H2BK11ac is frequently observed in euchromatic regions and is associated with genes that are actively expressed or under dynamic regulatory control. Its distribution provides insight into transcriptional regulation across the genome.

At the cellular level, H2B lysine 11 acetylation localizes to the nucleus and is enriched in transcriptionally active chromatin domains. This supports its use in studying gene expression and chromatin accessibility.

This antibody supports detection of Lys11-acetylated Histone H2B, enabling investigation of transcriptional regulation, chromatin accessibility, and epigenetic control of gene expression.

Application Notes

The stated application concentrations are suggested starting points. Titration of the H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An acetyl-peptide corresponding to Acetyl-Histone H2B (Lys11) was used as the immunogen for the H2BK11ac Antibody / HIST1H2B Transcription Regulation Antibody.

Storage

Store the recombinant H2BK11ac antibody at -20oC.

Alternate Names

Histone H2B Lys11 acetylation antibody, H2BK11ac transcription antibody, acetyl histone H2B Lys11 antibody, H2B K11

acetyl histone antibody

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