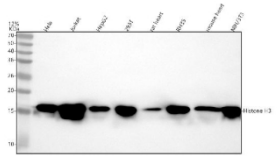
H3K36me1 Antibody / Histone H3 (mono methyl K36) Antibody [clone DEG-8] (FY12310)

Catalog No.	Formulation	Size
FY12310	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	DEG-8
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P68431
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml
Limitations	This Histone H3 (mono methyl K36) antibody is available for research use only.



H3K36me1 Antibody / Histone H3 (mono methyl K36) Antibody (clone DEG-8) for WB. Western blot analysis of HIST1H3A / Histone H3 Lys36 monomethylation (K36me1) across multiple species and cell types including human HeLa, Jurkat, HepG2, and 293T cells, rat heart and RH35 cells, and mouse heart and NIH/3T3 cells using H3K36me1 Antibody / Histone H3 (mono methyl K36) Antibody. A band is detected at the predicted molecular weight of approximately 15-17 kDa corresponding to monomethylated Histone H3, consistent with gene body-associated chromatin and early transcription elongation states.

Description

Histone H3 (HIST1H3A) methylation at lysine 36 is a key regulator of transcriptional elongation and gene body chromatin organization. Monomethylation at lysine 36 represents an early-stage chromatin modification associated with transcriptional transition and initial elongation. Histone H3 (mono methyl K36) Antibody / HIST1H3A Early Elongation Chromatin Antibody (clone DEG-8) is designed to detect Histone H3 monomethylated at lysine 36, providing a marker of chromatin states associated with early transcriptional progression. 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 H3K36me1 antibody in the literature, recognizes a modification enriched within gene bodies of actively transcribed genes. Unlike H3K36me3, which marks fully elongating transcription, H3K36me1 reflects an earlier and more dynamic stage in transcriptional progression.

This recombinant rabbit monoclonal clone DEG-8 antibody is uniquely positioned for studies of early elongation and transcriptional transition rather than promoter activation or enhancer function. Compared with H3K36ac, which reflects acetylation-associated transcriptional activity, H3K36me1 provides a methylation-based view of chromatin states during initial elongation phases.

At the molecular level, H3K36 monomethylation contributes to chromatin environments that support RNA polymerase II progression and chromatin remodeling during transcription. It may serve as a precursor to higher methylation states that define stable transcriptional elongation domains.

This modification provides insight into dynamic transcriptional processes and transitional chromatin states that are not fully committed to elongation but are actively engaged in transcriptional progression.

In western blot applications, the antibody detects Histone H3 at approximately 15 kDa, with signal corresponding to monomethylated chromatin within gene bodies. Detection reflects early transcriptional elongation rather than promoter activation, enhancer activity, or structural chromatin organization.

At the cellular level, H3K36 monomethylation localizes to the nucleus and is enriched in euchromatic regions associated with active genes. This distribution supports its use in studying transcriptional progression and chromatin dynamics.

This antibody supports detection of Lys36-monomethylated Histone H3, enabling investigation of early transcriptional elongation, gene body chromatin organization, and epigenetic regulation of gene expression.

Application Notes

Optimal dilution of the H3K36me1 Antibody / Histone H3 (mono methyl K36) Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Histone H3 (mono methyl K36) was used as the immunogen for the H3K36me1 Antibody / Histone H3 (mono methyl K36) Antibody.

Storage

Store the Histone H3 (mono methyl K36) antibody at -20oC.

Alternate Names

Histone H3 Lys36 monomethylation antibody, H3K36me1 elongation antibody, histone H3 mono methyl Lys36 antibody, H3K36 monomethyl histone antibody, Histone H3 (mono methyl K36) antibody