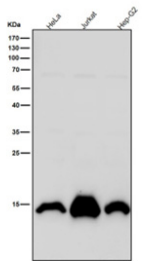
Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody [clone 31H85] (FY13228)

Catalog No.	Formulation	Size
FY13228	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

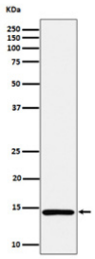
Recombinant RABBIT MONOCLONAL

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	31H85
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	P04908
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200 Immunocytochemistry/Immunofluorescence : 1:50-1:200
Limitations	This Histone H2A (mono methyl K118) antibody is available for research use only.



Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody (clone 31H85) for WB. Western blot analysis of HIST1H2A / Histone H2A Lys118 monomethylation (H2AK118me1) in human cell lysates including HeLa, Jurkat, and HepG2 using Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody. A band is detected at the predicted molecular weight of approximately 14 kDa corresponding to monomethylated Histone H2A, consistent with nucleosome-associated chromatin and structural regulation of chromatin stability.



Western blot analysis of Histone H2A (mono methyl K118) expression in human HeLa cell lysate using Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody. Predicted molecular weight ~15 kDa.

Description

Histone H2A (HIST1H2A) monomethylation at lysine 118 represents a structural chromatin modification associated with nucleosome stability and regulation of chromatin architecture. Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody (clone 31H85) is designed to detect Histone H2A monomethylated at lysine 118, providing a marker of chromatin structural integrity and nucleosome organization. Included within the Histone H2A antibodies collection, this antibody enables analysis of histone modification patterns and chromatin regulatory mechanisms involving H2A and its variants.

HIST1H2A antibody, also referred to as Histone H2A antibody and H2AK118me1 antibody in the literature, recognizes a modification located within the core region of the nucleosome rather than the flexible histone tail. This positioning distinguishes it from many histone modifications that regulate transcription through accessibility changes.

This recombinant rabbit monoclonal clone 31H85 antibody is uniquely positioned for studies of chromatin structure and nucleosome dynamics. H2A lysine 118 monomethylation is associated with maintenance of nucleosome stability and proper chromatin compaction.

At the molecular level, methylation at lysine 118 may influence interactions between histone proteins within the nucleosome core, affecting DNA wrapping and nucleosome positioning. This modification contributes to the physical properties of chromatin rather than directly regulating transcriptional activation or repression.

Unlike acetylation marks that promote open chromatin or phosphorylation marks linked to signaling, H2AK118me1 reflects structural chromatin states. It may act as a stabilizing modification that preserves nucleosome integrity across genomic regions.

This modification is important for maintaining genome organization and ensuring proper chromatin folding, particularly in regions requiring consistent structural stability.

At the cellular level, H2A lysine 118 monomethylation localizes to the nucleus and is distributed across chromatin regions involved in structural organization. Its presence reflects chromatin architecture rather than transcriptional status.

This antibody supports detection of Lys118-monomethylated Histone H2A, enabling investigation of nucleosome stability, chromatin structure, and epigenetic regulation of genome organization.

Application Notes

Optimal dilution of the Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Histone H2A (mono methyl K118) was used as the immunogen for the Histone H2A (mono methyl K118) Antibody / HIST1H2A Nucleosome Stability Antibody.

Storage

Store the Histone H2A (mono methyl K118) antibody at -20oC.

Alternate Names

Histone H2A Lys118 monomethylation antibody, H2AK118me1 nucleosome stability antibody, mono methyl histone H2A Lys118 antibody, H2A K118 methyl antibody