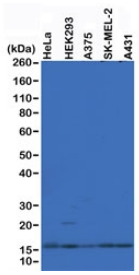
Recombinant Histone H2AZ Antibody [clone RM215] (R20251)

Catalog No.	Formulation	Size
R20251-100UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ug
R20251-25UG	1 mg/ml in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	25

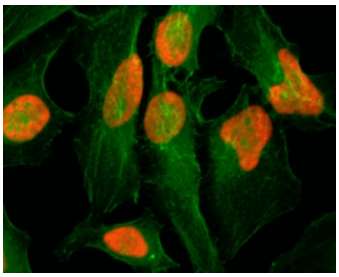
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	All Species
Format	Purified
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM215
Purity	Protein A purified from animal origin-free supernatant
UniProt	P0C0S5
Gene ID	3015
Applications	Western Blot : 0.1-0.5ug/ml Immunocytochemistry : 1-2ug/ml ELISA : 0.1-1ug/ml
Limitations	This recombinant Histone H2AZ antibody is available for research use only.



Western blot of A375, HEK293, HeLa, SK-MEL-2 and A431 whole cell lysates using recombinant Histone H2AZ antibody at 0.5 ug/ml.



ICC/IF of HeLa cells using recombinant Histone H2AZ antibody (red). Actin filaments have been labeled with fluorescein phalloidin (green).

Description

The Recombinant Histone H2AZ antibody is a recombinant reagent designed to detect histone H2AZ, a highly conserved variant of histone H2A that plays specialized roles in transcriptional regulation and chromatin architecture. H2AZ is incorporated into nucleosomes at promoter regions, enhancers, and other regulatory sites, where it contributes to both gene activation and repression depending on the context. Its ability to destabilize nucleosome structure allows greater accessibility of DNA to transcription factors, while in other settings it stabilizes chromatin against inappropriate activation. The Recombinant Histone H2AZ antibody provides reliable detection of this important histone variant, supporting studies of epigenetic regulation and genome organization.

Histone H2AZ differs from canonical H2A by several amino acid substitutions that alter its structural and functional properties. It can replace H2A in nucleosomes, generating altered chromatin domains with unique dynamics. The deposition of H2AZ into chromatin is mediated by ATP-dependent chromatin remodeling complexes such as SWR1. Once incorporated, H2AZ influences nucleosome positioning, chromatin boundary formation, and transcriptional plasticity. The Recombinant Histone H2AZ antibody specifically recognizes epitopes unique to this histone variant, distinguishing it from H2A and H2AX.

In western blotting, the Recombinant Histone H2AZ antibody detects H2AZ in nuclear extracts, providing a measure of variant incorporation across cell types or experimental conditions. In immunofluorescence, it reveals nuclear staining patterns enriched at transcriptionally active chromatin regions. In immunohistochemistry, the antibody highlights H2AZ distribution in tissues, offering insights into developmental gene regulation and disease-associated chromatin remodeling. The antibody can also be used in chromatin immunoprecipitation (ChIP) assays to enrich genomic regions containing H2AZ, facilitating genome-wide mapping of this variant. Recombinant production ensures batch-to-batch consistency, eliminating variability often observed with polyclonal reagents.

H2AZ has been linked to diverse biological processes, including X-chromosome inactivation, heat shock gene activation, and regulation of cell cycle genes. Dysregulation of H2AZ expression or incorporation has been associated with cancer, inflammation, and neurological disorders, making it a focus of both basic and translational research. Synonym phrases such as recombinant H2AZ antibody, recombinant histone H2A.Z antibody, and recombinant histone variant H2AZ antibody broaden product visibility for users referencing alternate naming conventions.

By delivering validated and reproducible detection, the Recombinant Histone H2AZ antibody enhances accuracy in studies of nucleosome remodeling and transcriptional control. NSJ Bioreagents supplies this antibody under rigorous quality standards, giving researchers confidence in applications such as western blotting, immunofluorescence, immunohistochemistry, and ChIP. With its specificity for H2AZ, this reagent is an indispensable tool for investigating how histone variants contribute to epigenetic regulation and chromatin dynamics.

This recombinant Histone H2AZ antibody reacts to Histone H2AZ protein, independent of post-translational modifications. No cross reactivity with other histone proteins.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant Histone H2AZ antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to the C-terminus of human Histone H2AZ was used as the immunogen for this recombinant Histone H2AZ antibody.

Storage

Store the recombinant Histone H2AZ antibody at -20oC (with glycerol) or aliquot and store at -20oC (without glycerol).