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Anti-Histone H2AvD pS137 (RABBIT) Antibody

Histone H2AvD phosphoS137 Antibody
Catalog # ASR5336

Specification

Anti-Histone H2AvD pS137 (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Drosophila melanogaster**
Clonality	**Polyclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Histone H2AvD pS137 Antibody is tested in ELISA, Immunohistochemistry, and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 14 kDa in size corresponding to phosphorylated H2AvD protein by western blotting in the appropriate Drosophila tissue or cell lysate or extract. Minimal reactivity is observed against the non-phosphorylated form of the immunizing peptide. This antibody is phospho specific for pS137 of H2AvD protein.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**Histone H2AvD pS137 Antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-Terminal region near amino acids 125-141 of Drosophila melanogaster (fruit fly) H2AvD protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-Histone H2AvD pS137 (RABBIT) Antibody - Additional Information

Gene ID 43229

Other Names
43229

Purity
Affinity purified Anti-Histone H2AvD pS137 Antibody is directed against the phosphorylated form of Drosophila H2AvD protein at the pS137 residue. The product was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide. Reactivity occurs against Drosophila H2AvD pS137 protein and the antibody is specific for the phosphorylated form

of the protein. Reactivity with non-phosphorylated Drosophila H2AvD is minimal by ELISA. A BLAST analysis was used to suggest little to no cross reactivity with H2AvD proteins from other sources based on a comparison using the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition
Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Histone H2AvD pS137 (RABBIT) Antibody - Protein Information

Name His2Av

Synonyms H2AvD, His2AvD

Function
Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post- translational modifications of histones, also called histone code, and nucleosome remodeling. Acts as a Polycomb group (PcG) protein required to maintain the transcriptionally repressive state of homeotic genes of the animal throughout development. Required for histone H3 'Lys-9' methylation and histone H4 'Lys-12' acetylation, two modifications that are essential for heterochromatin formation. Also involved in DNA double strand break (DSB) repair. Essential for early development.

Cellular Location
Nucleus. Chromosome. Note=Widely distributed in the genome, irrespective of the transcriptional status or coding capacity of the sequence

Anti-Histone H2AvD pS137 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Histone H2AvD pS137 (RABBIT) Antibody - Images

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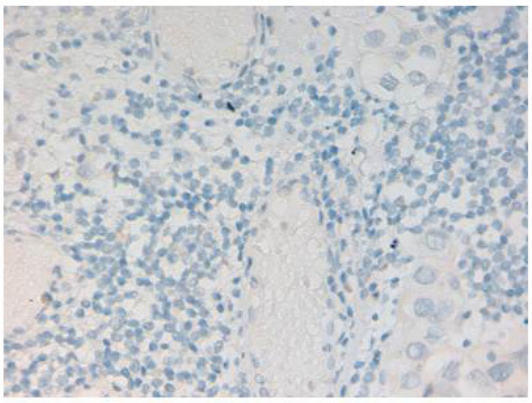

Immunohistochemistry with anti-Histone Antibody. Tissue: Human Bladder Cancer. Fixation: FFPE buffered formalin 10% conc. Ag Retrieval: HIER citrate buffer pH6 or HIER EDTA pH9. Primary antibody: 2 ug/ml at 2 hr. Secondary Ab: anti rabbit polymer HRP 20 ‘ RT.

Anti-Histone H2AvD pS137 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Variant histones H2A are synthesized throughout the cell cycle and are very different from classical S-phase regulated H2A. H2AvD is vital for viability, but the exact function of variant histones H2A is not known. H2A is a core component of the nucleosome, an octamer containing two molecules each of H2A, H2B, H3 and H4. The octamer wraps approximately 146 bp of DNA. HsAvD is expressed both maternally and zygotically and is found in embryos through to adults (female only). The human homologue, H2AX, is phosphorylated by ATM protein kinase when double strand DNA breaks occur. In mouse, H2AX ''knock out'' mice have an increased incidence of cancer.