

Rabbit Anti-Histone H2A.Z antibody

SL8154R

Product Name:	Histone H2A.Z
	222 2 2
Chinese Name:	组蛋白H2AZ抗体
Alias:	H2A histone family member Z; H2A.z; H2A/z; H2AFZ; H2AZ; MGC117173;
	H2AZ_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections
	need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	13kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Histone H2A.Z:71-128/128
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
	antibody is stable at room temperature for at least one month and for greater than a year
	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Histones are basic nuclear proteins that are responsible for the nucleosome structure of
	the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of
	DNA wrapped around a histone octamer composed of pairs of each of the four core
	histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through
	the interaction of a linker histone, H1, with the DNA between the nucleosomes to form
	higher order chromatin structures. This gene encodes a replication-independent member

of the histone H2A family that is distinct from other members of the family. Studies in mice have shown that this particular histone is required for embryonic development and indicate that lack of functional histone H2A leads to embryonic lethality. [provided by RefSeq, Jul 2008].

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. May be involved in the formation of constitutive heterochromatin. May be required for chromosome segregation during cell division.

Subunit:

The nucleosome is a histone octamer containing two molecules each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The octamer wraps approximately 147 bp of DNA. H2A or its variant H2AFZ forms an heterodimer with H2B. H2AFZ interacts with INCENP.

Subcellular Location:

Nucleus. Chromosome.

Post-translational modifications:

Monoubiquitination of Lys-122 gives a specific tag for epigenetic transcriptional repression.

Acetylated on Lys-5, Lys-8 and Lys-12 during interphase. Acetylation disappears at mitosis (By similarity).

Not phosphorylated.

Similarity:

Belongs to the histone H2A family.

SWISS:

P0C0S5

Gene ID:

3015

Database links:

Entrez Gene: 3015Human

Entrez Gene: 51788Mouse

Entrez Gene: 58940Rat

Omim: 142763Human

SwissProt: P0C0S5Human

SwissProt: P0C0S6Mouse

SwissProt: P0C0S7Rat

Unigene: 119192Human

Unigene: 117541Mouse

Unigene: 112573Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.