

Immunotag™ Histone H2B Polyclonal Antibody

[illegible]

Antibody Specification

Description	histone cluster 1 H2B family member b(HIST1H2BB) Homo sapiens Histones are basic nuclear proteins structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted by the linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene encodes a replication-dependent histone that is a member of the histone H2B family. Transcripts from this gene lack a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 12.
Cell Pathway/ Category	Systemic lupus erythematosus,
Protein Expression	Epithelium,
Subcellular Localization	nuclear chromosome, telomeric region,nucleosome,nuclear nucleosome,nucleus,nucleoplasm,cytoplasm
Protein Function	function:Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting accessibility of the DNA to the transcription machinery, which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA replication, and DNA stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones including acetylation, methylation, phosphorylation, and ubiquitination.,PTM:Monoubiquitination of Lys-121 by the RNF20/40 complex gives a specific tag for epigenetic regulation and is a prerequisite for histone H3 'Lys-4' and 'Lys-79' methylation. It also functions cooperatively with the FACT complex to facilitate RNA polymerase II.,PTM:Phosphorylated on Ser-15 by STK4/MST1 during apoptosis; which facilitates apoptotic cell death.,PTM:Phosphorylated on Ser-15 in response to DNA double strand breaks (DSBs), and in correlation with some DNA repair processes.,similarity:Belongs to the histone H2B family.,subunit:The nucleosome is a fundamental unit of DNA packaging in eukaryotes, consisting of a double helix of DNA wound twice around two sets of eight core histone proteins each of H2A, H2B, H3 and H4 assembled in one H3-H4 heterotetramer and two H2A-H2B heterodimers. The DNA is approximately 147 bp long.
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.