

**Histone H2B (1-123 aa), Xenopus recombinant protein**  
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**Catalog # PBV11245r****Specification**

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**Histone H2B (1-123 aa), Xenopus recombinant protein - Product info**Calculated MW **13.7 kDa (1-123 aa) KDa****Histone H2B (1-123 aa), Xenopus recombinant protein - Additional Info****Other Names**

H2B, Histone H2B type 1-A, HIST1H2BA, TSH2B

Gene Source

Source

Assay&amp;Purity

Assay2&amp;Purity2

Recombinant

**Target/Specificity**

Histone H2B

**Xenopus****E. coli****SDS-PAGE; ≥90%****HPLC;****Yes****Format**

Lyophilized powder

**Storage**

-80°C; Lyophilized powder. Recommended buffer is 50 mM sodium phosphate, pH 7.2, containing 300 mM sodium chloride, 1 mM DTT, 1 mM EDTA and 20% glycerol.

**Histone H2B (1-123 aa), Xenopus recombinant protein - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Histone H2B (1-123 aa), Xenopus recombinant protein - Images****Histone H2B (1-123 aa), Xenopus recombinant protein - Background**

H2A is a core component of nucleosome. A nucleosome is the basic repeating unit of chromatin in which 146 base pairs of DNA wrap twice around an octamer of histones. The octamer is composed of two of each histone H2A, H2B, H3, and H4. DNA accessibility is regulated via a complex set of post-translational modifications of these histones, also called histone code, and nucleosome

remodeling. Histones H2A and H2B form a dimer. Histones H3 and H4 form a tetramer. The combination of two H2A/H2B dimers and one H3/H4 tetramer create the nucleosome core. Histone H2B undergoes many modifications which include acetylation, phosphorylation, ubiquitylation, sumoylation, and biotinylation that are important for regulation of gene transcription. 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.