

Histone H3 (1-136 aa), Human recombinant protein
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Catalog # PBV11246r**Specification**

Histone H3 (1-136 aa), Human recombinant protein - Product info

Primary Accession [P68431](#)
Calculated MW **15.5 kDa (1-136 aa) KDa**

Histone H3 (1-136 aa), Human recombinant protein - Additional Info

Gene ID **8350**
Gene Symbol **HIST1H3A**
Other Names
Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/l,
Histone H3/j, Histone H3/k, Histone H3/l

Gene Source **Human**
Source **E. coli**
Assay&Purity **SDS-PAGE; ≥95%**
Assay2&Purity2 **HPLC;**
Recombinant **Yes**
Target/Specificity
Histone H3

Format
Lyophilized powder

Storage
-80°C; Lyophilized powder. Recommended buffer is 50 mM sodium phosphate, pH 7.2, containing 100 mM sodium chloride and 20% glycerol.

Histone H3 (1-136 aa), Human 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 H3 (1-136 aa), Human recombinant protein - Images**Histone H3 (1-136 aa), Human 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 H3 undergoes many modifications which include acetylation, phosphorylation and methylation 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.

Histone H3 (1-136 aa), Human recombinant protein - References

Zhong R.,et al.Nucleic Acids Res. 11:7409-7425(1983).
Marashi F.,et al.Biochem. Cell Biol. 64:277-289(1986).
Albig W.,et al.Genomics 10:940-948(1991).
Kardalidou E.,et al.J. Cell. Biochem. 52:375-383(1993).
Runge D.,et al.Submitted (OCT-1994) to the EMBL/GenBank/DDBJ databases.