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**Recombinant Human Histone H3.1 / HIST1H3A / H3FA Protein****Cat.NO.: TP06641**

3th Edition

**Synonyms:**H3/A;H3FA;HIST1H3A;HIST1H3B;HIST1H3C;HIST1H3D;HIST1H3E;HIST1H3F;HIST1H3G;HIST1H3H;HIST1H3I;  
HIST1H3J

**Description:** Histone H3.1, also known as HIST1H3A, HIST1H3B, HIST1H3C, HIST1H3D, HIST1H3E, HIST1H3F, HIST1H3G, HIST1H3H, HIST1H3I, HIST1H3J, is a member of the histone H3 family which is a core component of nucleosome. It is expressed during S phase, then expression strongly decreases as cell division slows down during the process of differentiation. 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. Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around an 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.

**Form:** PBS**Molecular Weight:** 15.5 kDa**Sequences:** Met 1-Ala 136**Purity:** > 95% by HPLC**Concentration:****Endotoxin Level:** <1.0 EU per 1 ug of protein (determined by LAL method)**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.