

Histone Octamer, Recombinant Human

Catalog No	16-0001	Species	Human
Lot No	25300018-01	Source	<i>E. coli</i>
Pack Size	50 µg	Tag	None
Concentration	8.98 µM	MW	108,545 Da

DESCRIPTION

Human histone octamers (two each of histones H2A, H2B, H3, and H4) are made from recombinant histones expressed in *E. coli*. Octamers are the protein component of nucleosomes, the basic subunit of chromatin. Assembling this product with DNA bearing a 601 Widom sequence (e.g., EpiCypher 18-0005, 18-0006) produces a nucleosome. The 601 Widom sequence, originally discovered by Lowary and Widom [1], has high affinity for octamers.

TECHNICAL INFORMATION

Storage	Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid freeze/thaws.
Formulation	10 mM Tris-HCl pH 7.5, 1 mM EDTA, 2 M NaCl, 2 mM DTT, 20% glycerol

APPLICATION NOTES

Human recombinant histone octamers can be used for chromatin reconstitution experiments or as substrates for histone modifying enzymes. See Luger et al. [2] for recommended nucleosome reconstitution protocol. Histone octamers should not be stored under conditions where the salt concentration is lower than 800 mM. **Please see lot-specific Technical Datasheets for product concentration.**

GENE & PROTEIN INFORMATION

UniProt ID	H2A - P04908 (alt. names: H2A type 1-B/E, H2A.2, H2A/a, H2A/m) H2B - O60814 (alt. names: H2B K, HIRA-interacting protein 1) H3.1 - P68431 (alt.names: H3, H3/a, H3/b, H3/c, H3/d) H4 - P62805
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REFERENCES

- [1] Lowary & Widom *J. Mol. Biol.* (1998). PMID: 9514715
[2] Luger et al. *Methods Mol. Biol.* (1999). PMID: 10804500

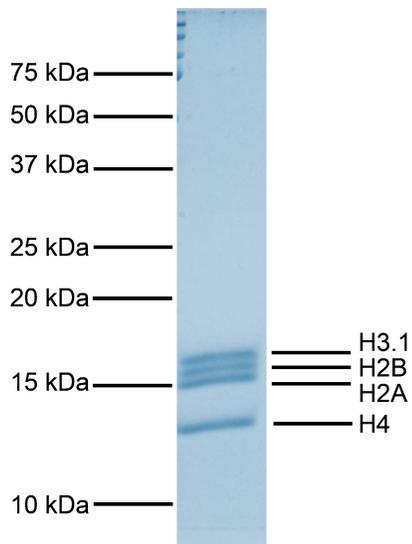


FIGURE 1 Protein gel data. Histone Octamer, Recombinant Human (1 μ g) run on an SDS-PAGE gel and stained with Coomassie blue to demonstrate the purity of the preparation. The individual histones are indicated.