Histone Octamer, Recombinant Human

Catalog No	16-0001	**Species**	Human
Lot No	24342016-03	**Source**	*E. coli*
Pack Size	50 µg	**Tag**	None
Concentration	9.9 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

REFERENCES

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

VALIDATION DATA

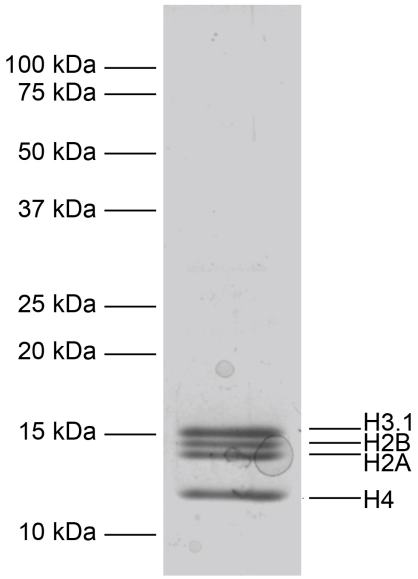

FIGURE 1 Protein gel data. Histone Octamer, Recombinant Human (1 µg) run on an SDS-PAGE gel and stained with Coomassie blue to demonstrate the purity of the preparation. The individual histones are indicated.