

Histone Octamer, Recombinant Human

Catalog No. 16-0001
Lot No. 14020002
Pack Size 50 µg

Product Description:

Human histone octamers (two each of histones H2A, H2B, H3 and H4) made from recombinant histones expressed in *E. coli* (accession numbers: H2A-P04908; H2B-O60814; H3.2-Q71DI3; H4-P62805). The histone octamer is the protein component of the nucleosome, the basic subunit of chromatin. A nucleosome consists of a histone octamer wrapped with 147 base pairs of DNA.

Formulation:

Gel filtration-purified recombinant human histone octamers (0.5 mg/ml) in 20 mM Tris pH 7.5, 2 M NaCl, 1 mM EDTA, 5 mM 2-mercaptoethanol.

Storage and Stability:

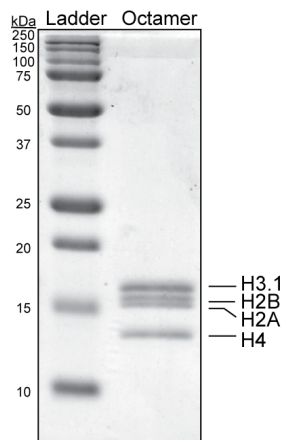
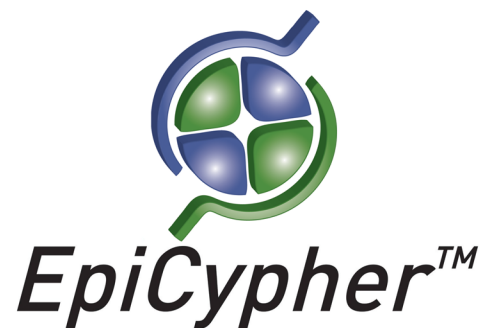
Stable for six months at -20°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

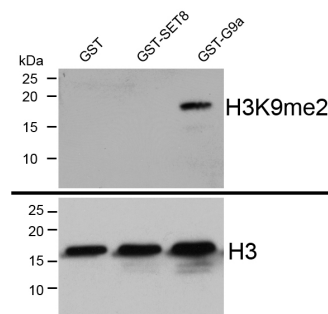
Human recombinant histone octamers can be used for chromatin reconstitution experiments, or as substrates for histone modifying enzymes. See product page on web for links to protocols for chromatin reconstitution. Histone octamers are stable only at high salt concentrations (greater than 800 mM).

References:

Cao et al (2013). *Epigenetics* 8: 477-485.



Protein Gel Data: Histone Octamer, Recombinant Human (1 µg) run on a PAGE gel and stained with Coomassie blue to demonstrate the purity of the preparation. The individual histones are indicated.



Methylation Assay Data: Histone Octamer, Recombinant Human used in methylation assays with GST-tagged SET domains as indicated. Reactions were loaded onto a PAGE gel and subjected to Western blotting. Top panel: anti-H3K9me2. Bottom panel: anti-histone H3 C-term (Catalog No. 13-0001).