

Recombinant Histone H3.1t

Catalog No: 81238, 81938

Expressed In: *E. coli*

Quantity: 100, 1000 µg

Concentration: 1.5 µg/µl

Source: Human

Buffer Contents: Recombinant Histone H3.1t is supplied in 25 mM Tris-HCl pH 7.4, 150 mM NaCl, and 10% glycerol.

Background: Histone H3 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 146 base pairs of DNA wrapped around an octamer of core histone proteins (two each of H2A, H2B, H3 and H4). Histone H1 is a linker protein, present at the interface between the nucleosome core and DNA entry/exit points. Nuclear core histone H3 exist as several variants: H3.1, H3.2, H3.3, CENP-A and H3t. These variants have been suggested to have specific functions in the regulation of gene expression and genome stability.

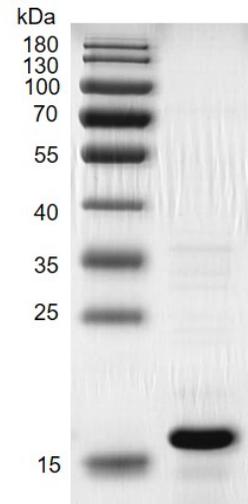
H3.1t, also called as H3T or H3.4, is a variant of histone H3 that is robustly expressed in the human testis. Like the conventional H3.1, H3.1t can be assembled into nucleosomes with H2A, H2B, and H4 (H3T nucleosome). A histone chaperone, Nap2 was found to be a more efficient chaperone for H3T nucleosome assembly than the ubiquitously expressed histone chaperone, Nap1. Therefore, H3.1t may be assembled into the chromatin by a specific chaperone-mediated pathway in the testis.

Protein Details: Recombinant Histone H3.1t was expressed in *E. coli* cells as full length protein (accession number: NP_003484.1) and has an observed molecular weight of 15.5 kDa.

Application Notes: This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data this product is shown.

Storage and Guarantee: Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

Histone H3.1t



Recombinant Histone H3.1t gel
12.5% SDS-PAGE gel with Coomassie blue staining
MW: 15.5 kDa
Purity: >90%