Recombinant Histone H4K20me3 (MLA), His-Tag

Catalog No: 31626, 31726
Expressed In: *E. coli*

Quantity: 100, 1000 µg
Concentration: 1.1 µg/µl
Source: Human

Buffer Contents: Recombinant Histone H4K20me3 (MLA), His-Tag is supplied in 25 mM Tris-HCl pH 7.4, 150 mM NaCl and 10% glycerol.

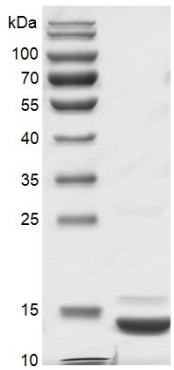
Background: Histone H4 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 146 base pairs of DNA wrapped around an octamer of core histone proteins (two each of H2A, H2B, H3 and H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/ exit points.

Recombinant Histone H4K20me3 (MLA) has been generated using the patented Methylated Lysine Analog (MLA) technology. In MLA, methylated histones are generated via a chemical alkylation reaction that substitutes a methylated analog of lysine, aminoethylcysteine, for the existing lysine at the desired residue. Aminoethylcysteine is structurally and cϒ-provides precise control over the site and degree of methylation. The MLA technology is covered under U.S. Patent No. 8,278,112.

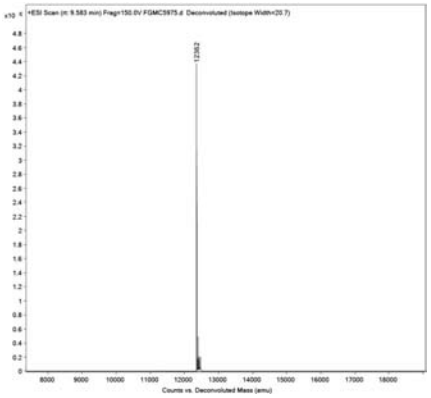
Protein Details: Recombinant Histone H4K20me3 (MLA), His-Tag was expressed in *E. coli* cells as full length protein (accession number: NP_003539.1) with a C-terminal 6×His tag, of which the Lysine 20 was mutated to Cysteine and then tri-methylated via MLA technology. The molecular weight of this protein is 12362 Da.

Application Notes: Recombinant Histone H4K20me3 (MLA), His-Tag is suitable for use as substrate for histone modification enzymes, or to generate chromatin *in vitro*.

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.



Recombinant Histone H4K20me3 (MLA), His-Tag protein gel
13% SDS-PAGE gel, stained with Coomassie Blue.
MW: 12.4 kDa
Purity: > 90%



ESI-TOF Mass Spec analysis for Recombinant Histone H4K20me3 (MLA), His-Tag

Expected mass: 12362 Da
Observed mass: 12362 Da