

Histone H3K4me2 Recombinant Protein | H3K4me2 recombinant protein

Recombinant Histone H3K4me2 (MLA)

CATALOG #
AAA59772

HOST
E Coli

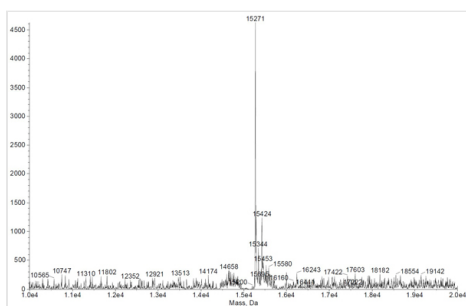
PRODUCT SYNONYMS

Histone H3K4me2; Recombinant Histone H3K4me2 (MLA); H3K4me2 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Form/Format	Recombinant Histone H3K4me2 (MLA) is supplied in 50mM Tris-HCl, pH8.0, 150mM NaCl and 5% glycerol.
Protein Species	Human
Conjugation	Methylated
Notes	Recombinant histones are suitable for use as positive controls in the analysis of histone post-translational modifications, as substrates for histone modification enzymes, or to generate chromatin in vitro.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

ESI-TOF Mass Spec analysis for Recombinant Histone H3K4me2 (MLA). Expected mass: 15271 Da Observed mass: 15271 Da



SDS-PAGE

Recombinant Histone H3K4me2 (MLA) protein gel. 12% SDS-PAGE Coomassie staining. Purity: > 85%

ADDITIONAL INFORMATION

Related Product Information for H3K4me2 recombinant protein	Short Description: Recombinant human Histone H3 dimethyl Lys4 (H3K4me2)(accession number NP_003520.1) was expressed in E Coli and contains two substitutions (cysteine to serine at amino acid 96 and cysteine to alanine at amino acid 110). Recombinant methylated histones are specifically methylated via a chemical alkylation reaction that introduces a methyl lysine analog (MLA). The molecular weight of the protein is 15271 Daltons. Recombinant histones are suitable for use as positive controls in the analysis of histone post-translational modifications, as substrates for histone modification enzymes, or to generate chromatin in vitro. 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. Recombinant Histone H3K4me2 (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 chemically similar to lysine, though it contains a sulfide substitution in place of the lysine g-methylene. The MLA technique provides precise control over the site and degree of methylation. The MLA technology is covered under U.S. Patent No. 8,278,112.
Product Categories/Family for H3K4me2 recombinant protein	Recombinant Proteins; Histone

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504281
NCBI GeneID	8350
NCBI Accession #	NP_003520.1
NCBI GenBank Nucleotide #	NM_003529.2
UniProt Accession #	P68431; P02295; P02296; P16106; Q6ISV8; Q6NWP8; Q6NWP9; Q6NXU4; Q71DJ3; Q93081; A0PJT7; A5PLR1
Molecular Weight	15,404 Da
NCBI Official Full Name	histone H3.1
NCBI Official Synonym Full Names	histone cluster 1, H3a
NCBI Official Symbol	HIST1H3A
NCBI Official Synonym Symbols	H3/A; H3FA
NCBI Protein Information	histone H3.1; histone H3/a; histone 1, H3a; H3 histone family, member A
UniProt Protein Name	Histone H3.1
UniProt Gene Name	HIST1H3A
UniProt Synonym Gene Names	H3FA
UniProt Entry Name	H31_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.