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Datasheet for ABIN2669555

Histone H4 Protein (3meLys5)

1 Image

Overview

Quantity:	50 µg
Target:	Histone H4
Protein Characteristics:	3meLys5
Origin:	Xenopus laevis
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	Positive Control (PC), Substrate (S)

Product Details

Characteristics:	Recombinant Xenopus laevis Histone H4 trimethyl Lys5 (H4K5me3) is produced in E. coli and purified using FPLC. Recombinant methylated histones are specifically methylated via a chemical alkylation reaction that introduces a methyl lysine analog (MLA). This specific chemical treatment enables the site and degree of methylation to be controlled precisely. Each methylation reaction is over 99 % complete, as verified by high-resolution ESI-TOF mass spectrometry. Protein concentration was determined using the molar extinction coefficient for Histone H4 and absorbance at 280nm. The recombinant histone is >98 % pure by SDS-PAGE. The molecular weight of the recombinant histone is 11,297 Daltons.
Purification:	Purified using FPLC
Purity:	The recombinant histone is >98 % pure by SDS-PAGE.

Target Details

Target:	Histone H4
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Target Details

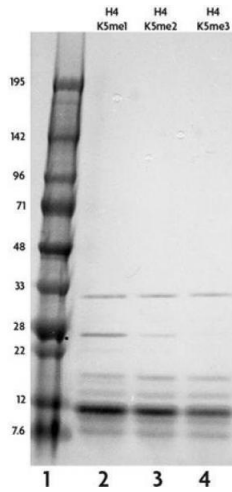
Abstract:	Histone H4 Products
Background:	Histone H4 is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 146 base pairs of DNA wrapped around an octamer of core histone proteins (two each of H2A, H2B, H3 and H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points.
Molecular Weight:	The molecular weight of the recombinant histone is 11,297 Daltons.

Application Details

Application 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.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Recombinant histones can be resuspended in water or any suitable buffer. We recommend a starting concentration of 1 mg/mL. To fully solubilize the histone we suggest resuspension in the buffer of choice at room temperature for 20-30 minutes with occasional pipetting. Addition of salt or Tris to the resuspension buffer may enhance histone solubility.
Handling Advice:	Avoid repeated freeze/thaw cycles and keep on ice when not in storage.
Storage:	-20 °C/-80 °C
Storage Comment:	Lyophilized proteins can be stored at -20°C or -80°C, preferably desiccated. Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation.



Western Blotting

Image 1. Recombinant Histone H4 trimethyl Lys5 tested by SDS-PAGE gel. SDS-PAGE analysis of 5 μ g Recombinant Histone H4 monomethyl Lys5 (lane 2), Recombinant Histone H4 dimethyl Lys5 (lane 3), and Recombinant Histone H4 trimethyl Lys5 (lane 4). Molecular weight marker is in lane 1.