

# Nucleosome, Recombinant Human, H4 Tetraacetyl (H4K5,8,12,16ac) dNuc, Non-Biotinylated

**Catalog No** 16-1313  
**Lot No** 21251002-01  
**Pack Size** 50 µg

## Product Description:

Mononucleosomes assembled from recombinant human histones expressed in *E. coli* (two each of histones H2A, H2B, H3 and H4; accession numbers: H2A-P04908; H2B-O60814; H3.1-P68431; H4-P62805) wrapped by 147 base pairs of 601 positioning sequence DNA. Histone H4 (created by a proprietary semi-synthetic method) contains N-term. α-acetylation and acetyl-lysine at positions 5, 8, 12 and 16. The nucleosome is the basic subunit of chromatin. The 601 sequence, identified by Lowary and Widom [1], is a 147-base pair sequence that is useful for nucleosome assembly.

## Formulation:

H4 Tetraacetyl dNuc (27.3 µg protein weight, 50 µg DNA + protein) in 54.5 µL 10 mM Tris-HCl pH 7.5, 1 mM EDTA, 25 mM NaCl, 2 mM DTT, & 20% glycerol. Molarity = 4.34 µM. MW = 200,332 Da.

## Storage and Stability:

Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

## Application Notes:

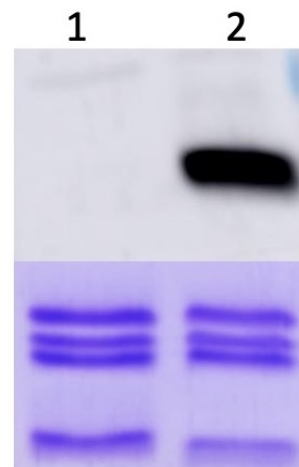
H4 Tetraacetyl dNuc is highly purified and suitable for a variety of applications, including use as a substrate in enzymatic assays or for effector protein binding experiments.

## References:

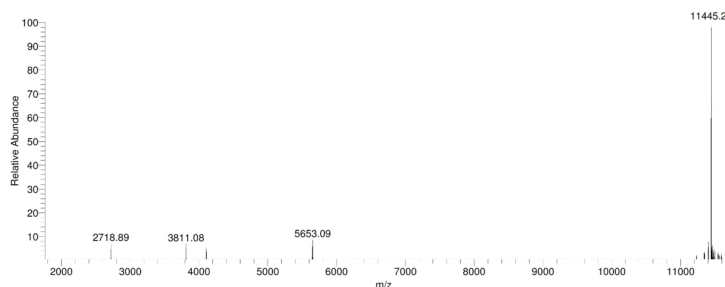
[1] Lowary PT and Widom J (1998) *J Mol Biol* 276:19-42.



# EpiCypher®

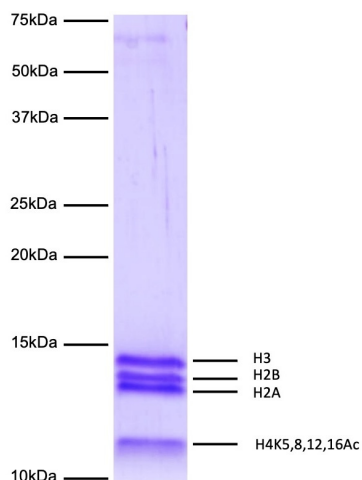


**Western Blot Data:** Western Analysis of H4 Tetraacetyl dNuc. **Top Panel:** Unmodified (EpiCypher 16-0009; Lane 1) and H4 Tetraacetyl (Lane 2) nucleosomes were probed with an anti-H4 Tetraacetyl antibody and analyzed via ECL readout. Only the H4 Tetraacetyl sample produced a

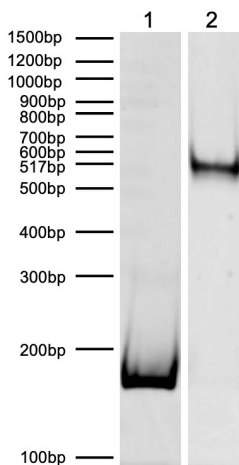


**Mass Spec Data:** Synthetic H4 Tetraacetyl histone analyzed by high resolution mass spectrometry. Expected mass = 11,446.0 Da. Determined mass = 11,445.21 Da.

This product is for *in vitro* research use only and is not intended for use in humans or animals.



**Protein Gel Data:** Coomassie stained PAGE gel of proteins in H4 Tetraacetyl dNuc (1 µg) demonstrates the purity of histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3 and H4 Tetraacetyl) are indicated.



**DNA Gel Data:** H4 Tetraacetyl dNuc resolved via native PAGE and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (EpiCypher 18-0006; 100 ng). **Lane 2:** Intact H4 Tetraacetyl nucleosomes (400 ng).

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