# EpiDyne® Nucleosome Remodeling Assay Substrate ST601-GATC1,2,3, Biotinylated

**Catalog No.** 16-4113
**Lot No.** 19004001
**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 provided 217 base pair DNA sequence that includes the 601 sequence with three added GATC sequences and a 5' biotin-TEG group.

## Formulation:

Purified recombinant mononucleosomes 0.97 mg/ml (DNA + protein weight) in 51.5 µl of 10mM Tris-HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. MW = 243,100.5 Da. Molarity = 3.97 µM.

## Storage and Stability:

Stable for six (6) months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

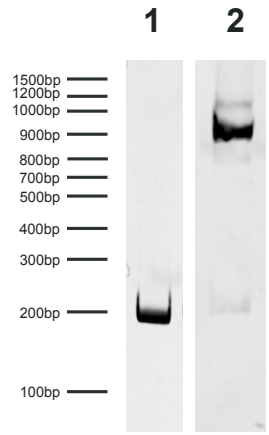
## Application Notes:

This product is a template for nucleosome remodeling assays using the restriction enzyme DpnII to determine accessibility of GATCs which is masked in its native configuration (prior to remodeling).

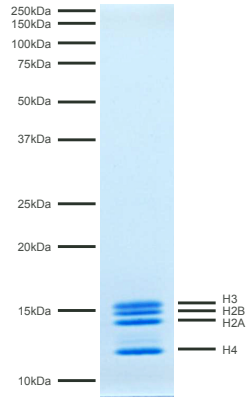
**DNA Sequence:**

GAATTCATCAGAATCCCGGTGCCGAGGCC**GATC**AATT**GATC**GTAGA
CA**GATC**TAGCACCGCTTAAACGCACGTACGCGCTGTCCCCCGCGTT
TTAACCGCCAAGGGGATTACTCCCTAGTCTCCAGGCACGTGTCAGA
TATATACATCGATGATGATGGATAGATGGATGATGGATGGATGGA
TGATGATGGATGAATAGATGGATGGATGAAGCTT

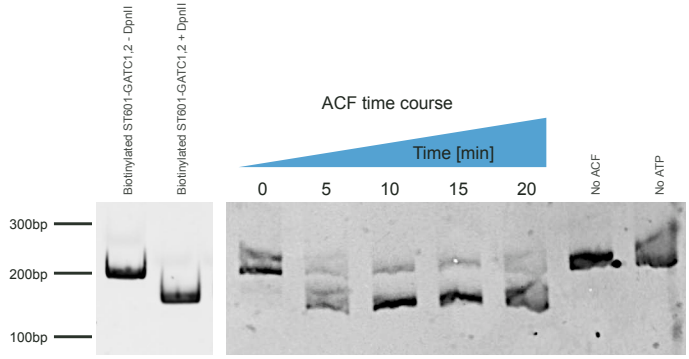
## References:




**DNA Gel Data:** Free DNA (Lane 1, 100 ng) and EpiDyne® Nucleosome Remodeling Assay Substrate ST601-GATC1,2,3, Biotinylated (Lane 2, 400 ng) resolved via native PAGE and stained with ethidium bromide to visualize DNA.




**Protein Gel Data:** Histone proteins in EpiDyne® Nucleosome Remodeling Assay Substrate ST601-GATC1,2,3, Biotinylated resolved via SDS-PAGE and coomassie staining (2 µg). Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3 and H4) are indicated.




**Nucleosome Remodeling Data:** ACF/ATP-dependent nucleosome remodeling reaction in the presence of DpnII restriction enzyme. EpiDyne® Nucleosome Remodeling Assay Substrate ST601-GATC1,2,3, Biotinylated nucleosomes incubated with (10 nm) or without ACF for up to 20 minutes in the presence of 2 mM ATP and 50U of DpnII. Samples were quenched at specified intervals and run on 8% native PAGE gel.