# **EpiDyne® Nucleosome Remodeling Assay Substrate** ST601-GATC1,2,3, 50-N-66, Biotinylated



# EpiCypher<sub>®</sub>

Catalog No. 16-4116

Lot No. 19241001

**Pack Size** 50 µg

## **Product Description:**

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 263 base pair DNA sequence that includes the 601 sequence with three added GATC sequences and a 5' biotin-TEG group.

Mononucleosomes assembled from recombinant human

# Formulation:

Purified recombinant mononucleosomes 0.97 mg/ml (DNA + protein weight) in 34.5 µl of 10mM Tris-HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol. MW = 271,082.4 Da. Molarity =  $5.35 \mu M$ .

# **Storage and Stability:**

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

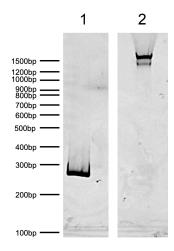
# **Application Notes:**

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).

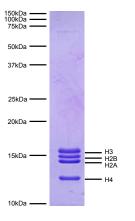
#### **DNA Sequence:**

GAACCAATGGGACCATGCTTCACACCGATATCATCGCTTATGTGTT GAATTCATCAGAATCCCGGTGCCGAGGCCGATCAATTGATCGTAG ACAGATCTAGCACCGCTTAAACGCACGTACGCGCTGTCCCCCGCG TTTTAACCGCCAAGGGGATTACTCCCTAGTCTCCAGGCACGTGTCA GATATATACATCGATGATGATGGATAGATGGATGATGGAT **GGATGATGATGATGATGATGATGATGATGAAGCTT** 

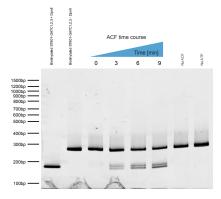
### References:



DNA Gel Data: Free DNA (DNA, EpiDyne® ng) and Nucleosome Remodeling Assay Substrate ST601-GATC1,2,3 50-N-66, Biotinylated (Nuc, 400 ng) run on an acrylamide gel and stained with ethidium bromide to visualize DNA.



Protein Gel **Data:** Histone EpiDyne® proteins in Nucleosome Remodeling Assay Substrate ST601-GATC1,2,3 50-N-66 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-GATC12,3, 50-N-66, Biotinylated nucleosomes incubated with (10 nM) or without ACF for up to 9 minutes in the presence of 2 mM ATP and 50U of DpnII. Samples were quenched at specified intervals and resolved via

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