

Nucleosome Remodeling Assay Substrate ST601-GATC1

Cat. No. NUC-059 **Lot. No.** (See product label)

SPECIFICATION

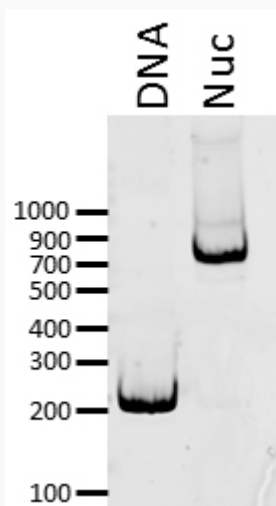
Product Overview	Mononucleosomes assembled from recombinant human histones expressed in E. coli.
Source	E.coli
Description	Mononucleosomes assembled from recombinant human histones expressed in E. coli (two each of histones H2A, H2B, H3 and H4. Accession numbers: H2A-P04908; H2B-O60814; H3.1-P68431; H4-P62805) wrapped by provided 217 base pair DNA sequence that includes the Widom 601 sequence with an added GATC.
Form	Purified recombinant mononucleosomes in 10mM Tris-HCl pH 7.5, 25 mM NaCl, 1 mM EDTA, 2 mM DTT, 20% glycerol.
Molecular Mass	242,900 Da
Applications	This product is a substrate for chromatin remodeling assays (e.g. ACF Remodeling Enzyme Complex) using restriction enzymes to determine accessibility of GATC subsequent to chromatin remodeling.
Storage	Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

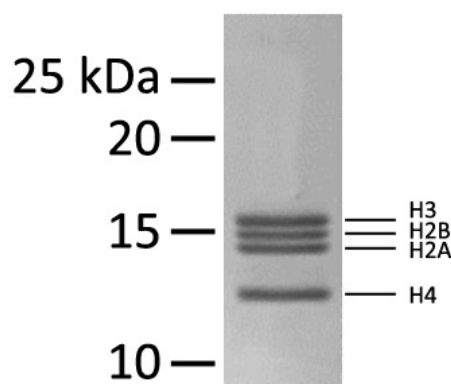
 45-1 Ramsey Road, Shirley, NY 11967, USA

DNA Gel Data



Free DNA (DNA, 200 ng) and EpiDyne Nucleosome Remodeling Assay Substrate ST601-GATC1 (Nuc, 370 ng) run on an acrylamide gel and stained with ethidium bromide to visualize DNA. Note absence of free DNA in "Nuc", indicating all DNA complexed with histones.

Protein Gel Data



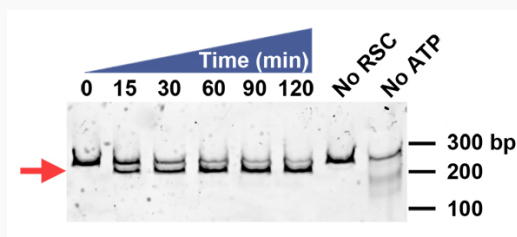
Coomassie stained PAGE gel of proteins in EpiDyne Nucleosome Remodeling

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Assay Substrate ST601-GATC1 (2 μ g) demonstrates the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3 and H4) are indicated.



Nucleosome Remodeling Data

RSC/ATP-dependent chromatin remodeling reaction in the presence of DpnII restriction enzyme. EpiDyne Nucleosome Remodeling Assay Substrate ST601-GATC1 was incubated with RSC chromatin remodeling complex (10 nm) or without (No RSC) for up to two hours in the presence of 2 mM ATP (or No ATP, as indicated) and 50U of DpnII. Samples were quenched at specified intervals and run on 8% native PAGE gel and stained with ethidium bromide. The appearance of a band at ~200 base pairs (red arrow) indicates cleavage at GATC subsequent to chromatin re remodeling.