

EpiDyne® Remodeling Assay Substrate DNA ST601-GATC1



EpiCypher®

Catalog No 18-4101
Lot No 21201002-01
Pack Size 50 µg

Product Description:

EpiDyne® Remodeling Assay Substrate DNA ST601-GATC1 is a 217 base-pair double-stranded DNA fragment containing the 601 nucleosome positioning sequence [1], which has high affinity for histone octamers and is useful for nucleosome assembly. The DNA also includes a 3' acceptor sequence to accommodate the histone octamer subsequent to remodeling. This positive control has a DpnII restriction site within the 601 sequence. When paired with the negative control DNA (EpiCypher 18-4100) these controls illustrate the migration range for the Restriction Enzyme Assay. See the EpiDyne Nucleosome Remodeling Assay Tech Note (Restriction Enzyme Assay) for more information:

epicypher.com/resources/technical-notes/

Formulation:

50 µg lyophilized ST601-GATC1 DNA.

Storage and Stability:

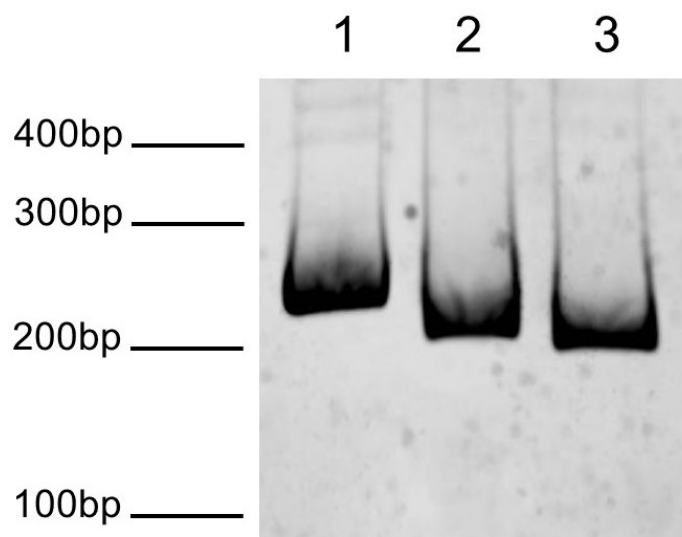
Stable for 2 years at -20°C from date of receipt. After resuspending, aliquots should be stored at -80°C.

Application Notes:

ST601-GATC1 DNA is useful as a positive control for restriction enzyme accessibility nucleosome remodeling assays using the Biotinylated EpiDyne Remodeling Assay Substrate, as a DpnII (GATC in red) restriction enzyme site are present within the 601 sequence. The naturally occurring MfeI restriction site (AATTGG in bold) remains present as well.

References:

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



DNA Gel Data: ST601-GATC1 DNA resolved via native PAGE gel and stained with ethidium bromide to visualize DNA. **Lane 1:** Free DNA (100 ng). **Lane 2:** Free DNA incubated with 2U DpnII for 1 hr at 37°C (100 ng). **Lane 3:** Free DNA incubated with 2U MfeI for 1 hr at 37°C (100 ng). Migration patterns of DNA molecular weight markers are indicated.

DNA Sequence:

```
GAATTCATCAGAATCCCGGTGCCGAGGCCGATCCAATTGGTCGTAGAC
AGCTCTAGCACCGCTTAAACGCACGTACGCGCTGTCCCCCGCTTTT
AACCGCCAAGGGGATTACTCCCTAGTCTCCAGGCACGTGTCAGATAT
ATACATCGATGATGATGGATAGATGGATGGATGGATGGATGGATGATG
ATGGATGAATAGATGGATGGATGAAGCTT
```

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