

New England Biolabs Certificate of Analysis

Product Name: Styl-HF[®]
Catalog Number: R3500S
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10058273
Expiration Date: 09/2021
Storage Temperature: -20°C
Storage Conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R3500S/L v1.0

| Styl-HF [®] Component List | | | |
|-------------------------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R3500SVIAL | Styl-HF [®] | 10055008 | Pass |
| B7204SVIAL | CutSmart [®] Buffer | 10053983 | Pass |
| B7024SVIAL | Gel Loading Dye, Purple (6X) | 10053978 | Pass |

| Assay Name/Specification | Lot # 10058273 |
|---|----------------|
| Ligation and Recutting (Terminal Integrity) After a 50-fold over-digestion of Lambda DNA with Styl-HF [™] , >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with Styl-HF [™] . | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart [™] Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of Styl-HF [™] incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart [™] Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of Styl-HF [™] incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart [™] Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 20 Units of Styl-HF [™] incubated for 4 hours at 37°C results in <10% | Pass |

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|---|----------------|
| conversion to the nicked form as determined by agarose gel electrophoresis. | |

This product has been tested and shown to be in compliance with all specifications.

 

Anthony Francis
Production Scientist
17 Sep 2019



Jay Minichiello
Packaging Quality Control Inspector
02 Dec 2019