

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: 10161051
Expiration Date: 08/2024
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 [®]	10161050	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10161525	Pass
B6004SVIAL	rCutSmart [™] Buffer	10162781	Pass

Assay Name/Specification	Lot # 10161051
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
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
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% conversion to the nicked form 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	Pass

Assay Name/Specification	Lot # 10161051
for 4 hours at 37°C releases <0.1% of the total radioactivity.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.


YunJie Sun
Production Scientist
22 Aug 2022


Michael Tonello
Packaging Quality Control Inspector
27 Sep 2022