

New England Biolabs Certificate of Analysis

Product Name: Fspl
Catalog Number: R0135L
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in rCutSmart Buffer in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10211256
Expiration Date: 11/2025
Storage Temperature: -20°C
Storage Conditions: 10mM Tris-HCl, 300mM NaCl, 0.1mM EDTA, 1mM DTT, 0.15% Triton X-100, 300 µg/ml rAlbumin, 50% Glycerol (pH 7.5 @ 25°C)
Specification Version: PS-R0135S/L v2.0

Fspl Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0135LVIAL	Fspl	10211235	Pass
B6004SVIAL	rCutSmart™ Buffer	10207415	Pass

Assay Name/Specification	Lot # 10211256
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of Fspl incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Functional Testing (15 minute Digest) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of Lambda DNA and 1 µl of Fspl incubated for 15 minutes at 37°C results in complete digestion as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Fspl, ~50% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25°C. Of these ligated fragments, >95% can be recut with Fspl.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 units of Fspl incubated for 16 hours at 37°C results in a DNA pattern free of	Pass


Assay Name/Specification	Lot # 10211256
detectable nuclease degradation as determined by agarose gel electrophoresis.	
<p>Protein Purity Assay (SDS-PAGE) FspI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>qPCR DNA Contamination (E. coli Genomic) A minimum of 10 units of FspI is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.</p>	Pass

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

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YunJie Sun
Production Scientist
25 Oct 2023



Michael Tonello
Packaging Quality Control Inspector
13 Nov 2023