New England Biolabs
Certificate of Analysis

Product Name:	*FspI*
Catalog Number:	*R0135S*
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 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10073963*
Expiration Date:	*05/2022*
Storage Temperature:	*-20°C*
Storage Conditions:	*300mM NaCl, 10mM Tris-HCl (pH 7.5), 0.1mM EDTA, 1mM dithiothreitol, 0.15% Triton X-100, 300 ug/ml BSA, 50% glycerol*
Specification Version:	*PS-R0135S/L v1.0*

FspI Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
R0135SVIAL	FspI	10073962	**Pass**
B7204SVIAL	CutSmart® Buffer	10074633	**Pass**

Assay Name/Specification	Lot # 10073963
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 units of FspI incubated for 4 hours at 37ºC releases <0.1% of the total radioactivity.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with FspI, ~50% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25ºC. Of these ligated fragments, >95% can be recut with FspI.	**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 FspI incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**

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

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Penghua Zhang
Production Scientist
12 Jun 2020

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Michael Tonello
Packaging Quality Control Inspector
12 Jun 2020