

## New England Biolabs Certificate of Analysis

**Product Name:** *FspI*  
**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 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Lot Number:** *10042822*  
**Expiration Date:** *05/2021*  
**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 µg/ml BSA, 50% glycerol*  
**Specification Version:** *PS-R0135S/L v1.0*

FspI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0135LVIAL	FspI	10042823	Pass
B7204SVIAL	CutSmart® Buffer	10036669	Pass

Assay Name/Specification	Lot # 10042822
<b>Non-Specific DNase Activity (16 Hour)</b> 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 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> 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 25°C. Of these ligated fragments, >95% can be recut with FspI.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 100 units of FspI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass

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



Doreen Duquette  
Production Scientist  
22 Apr 2019



Jay Minichiello  
Packaging Quality Control Inspector  
03 May 2019