

## New England Biolabs Certificate of Analysis

*Product Name:* FspI  
*Catalog #:* R0135S/L  
*Concentration:* 10,000 units/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 #:* 0601608  
*Assay Date:* 08/2016  
*Expiration Date:* 8/2018  
*Storage Temp:* -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  
*Effective Date:* 08 Jul 2013

| Assay Name/Specification (minimum release criteria)  | Lot #0601608 |
|--|--------------|
| <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] <i>E. coli</i> DNA and a minimum of 100 units of FspI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | <b>Pass</b>  |
| <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.  | <b>Pass</b>  |
| <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.     | <b>Pass</b>  |

\* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by  
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08 Jul 2013



Inspected by  
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16 Aug 2016

