

## New England Biolabs Certificate of Analysis

**Product Name:** Bsp1286I  
**Catalog Number:** R0120S  
**Concentration:** 5,000 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 50 µl of reaction buffer.  
**Packaging Lot Number:** 10066541  
**Expiration Date:** 02/2022  
**Storage Temperature:** -20°C  
**Storage Conditions:** 50 mM KCl , 10 mM Tris-HCl (7.4), 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 400 µg/ml BSA  
**Specification Version:** PS-R0120S/L v1.0

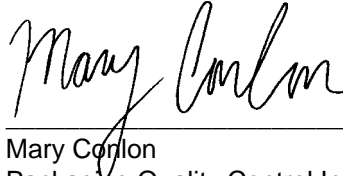
| Bsp1286I Component List |                       |            |                      |
|-------------------------|-----------------------|------------|----------------------|
| NEB Part Number         | Component Description | Lot Number | Individual QC Result |
| R0120SVIAL              | Bsp1286I              | 10066540   | Pass                 |
| B7204SVIAL              | CutSmart® Buffer      | 10069110   | Pass                 |

| Assay Name/Specification  | Lot # 10066541 |
|---|----------------|
| <b>Exonuclease Activity (Radioactivity Release)</b><br>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 50 units of Bsp1286I incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.  | <b>Pass</b>    |
| <b>Ligation and Recutting (Terminal Integrity)</b><br>After a 10-fold over-digestion of Lambda DNA with Bsp1286I, >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 Bsp1286I.                                       | <b>Pass</b>    |
| <b>Non-Specific DNase Activity (16 Hour)</b><br>A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 5 Units of Bsp1286I 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>    |

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



Penghua Zhang  
Production Scientist  
07 Apr 2020



Mary Conlon  
Packaging Quality Control Inspector  
07 Apr 2020