

## 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.  
**Lot Number:** 10032386  
**Expiration Date:** 12/2020  
**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	10032387	Pass
B7204SVIAL	CutSmart® Buffer	10021125	Pass

Assay Name/Specification	Lot # 10032386
<p><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 50 units of Bsp1286I incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Ligation and Recutting (Terminal Integrity)</b>            After a 10-fold over-digestion of Lambda DNA with Bsp1286I, &gt;95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, &gt;95% can be recut with Bsp1286I.</p>	Pass
<p><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 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.</p>	Pass

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



Tony Spear-Alfonso  
Production Scientist  
10 Dec 2018



Josh Hersey  
Packaging Quality Control Inspector  
17 Jan 2019