

## New England Biolabs Certificate of Analysis

**Product Name:** Bsu36l  
**Catalog Number:** R0524L  
**Concentration:** 10,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA (Hind III digest) in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10135265  
**Expiration Date:** 08/2023  
**Storage Temperature:** -20°C  
**Storage Conditions:** 250 mM NaCl , 10 mM Tris-HCl (7.4), 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 0.15 % TritonX-100 , 200 µg/ml BSA  
**Specification Version:** PS-R0524S/L v1.0

Bsu36l Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0524LVIAL	Bsu36l	10117489	Pass
B6004SVIAL	rCutSmart™ Buffer	10123108	Pass

Assay Name/Specification	Lot # 10135265
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 30 units of Bsu36l 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
<p><b>Ligation and Recutting (Terminal Integrity)</b>            After a 2-fold over-digestion of Lambda-HindIII DNA with Bsu36l, ~25% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25°C. Of these ligated fragments, &gt;95% can be recut with Bsu36l.</p>	Pass
<p><b>Endonuclease Activity (Nicking)</b>            A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 units of Bsu36l incubated for 4 hours at 37°C results in &lt;20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and</p>	Pass

Assay Name/Specification	Lot # 10135265
double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 100 units of Bsu36I incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.




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10 Feb 2022




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10 Feb 2022