

## New England Biolabs Certificate of Analysis

**Product Name:** Bsu36l  
**Catalog Number:** R0524S  
**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:** 10122806  
**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
R0524SVIAL	Bsu36l	10117490	Pass
B6004SVIAL	rCutSmart™ Buffer	10121395	Pass

Assay Name/Specification	Lot # 10122806
<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 100 units of Bsu36l incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</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>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>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</p>	Pass

Assay Name/Specification	Lot # 10122806
pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	

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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07 Oct 2021



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Michael Tonello  
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07 Oct 2021