

## New England Biolabs Certificate of Analysis

**Product Name:** BsrDI  
**Catalog Number:** R0574L  
**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 65°C in a total reaction volume of 50 µl.  
**Lot Number:** 10032436  
**Expiration Date:** 01/2021  
**Storage Temperature:** -20°C  
**Storage Conditions:** 100 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA  
**Specification Version:** PS-R0574S/L v1.0

BsrDI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0574LVIAL	BsrDI	10032438	Pass
B7202SVIAL	NEBuffer™ 2.1	0261805	Pass

Assay Name/Specification	Lot # 10032436
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in NEBuffer 2.1 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 BsrDI incubated for 4 hours at 65°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 BsrDI, &gt;95% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25°C. Of these ligated fragments, ~75% can be recut with BsrDI.</p>	Pass
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in NEBuffer 2.1 containing 1 µg of Lambda DNA and a minimum of 5 units of BsrDI incubated for 16 hours at 65°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.

*Stephanie Cornelio*

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Stephanie Cornelio  
Production Scientist  
28 Dec 2018

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
08 Jan 2019