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## New England Biolabs Certificate of Analysis

Product Name: BseYI
Catalog Number: R0635S
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 a total reaction volume of 50 μl.

Packaging Lot Number: 10094873
Expiration Date: 12/2022
Storage Temperature: -20°C

Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 500 µg/ml BSA

Specification Version: PS-R0635S/L v1.0

BseYl Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0635SVIAL	BseYI	10092091	Pass	
B7203SVIAL	NEBuffer™ 3.1	10092685	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10089393	Pass	

Assay Name/Specification	Lot # 10094873
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in NEBuffer 3.1 containing 1 μg of a mixture of single and double-stranded [ ³H] E. coli DNA and a minimum of 25 units of BseYl incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of Lambda DNA with BseYI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with BseYI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 15 Units of BseYl incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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 for additional information.



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NEW ENGLAND

Josh Hersey

Packaging Quality Control Inspector

18 Jan 2021

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