

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name: BseYI
Catalog Number: R0635L
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: 10092110
Expiration Date: 08/2022
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				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0635LVIAL	BseYI	10080568	Pass	
B7203SVIAL	NEBuffer™ 3.1	10085493	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10084972	Pass	

Assay Name/Specification	Lot # 10092110
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.

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Penghua Zhang Production Scientist 24 Nov 2020 Josh Hersey

Packaging Quality Control Inspector

24 Nov 2020