

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: 10158594
Expiration Date: 08/2024
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

BseYI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0635LVIAL	BseYI	10158593	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10153339	Pass
B6003SVIAL	NEBuffer™ r3.1	10146824	Pass

Assay Name/Specification	Lot # 10158594
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 25 units of BseYI incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	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 BseYI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	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

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.



Penghua Zhang
Production Scientist
10 Aug 2022



Erin Varney
Packaging Quality Control Inspector
10 Aug 2022