New England Biolabs
Certificate of Analysis

Product Name:	*BseYI*
Catalog #:	*R0635S/L*
Concentration:	*5,000 units/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.*
Lot #:	*0181707*
Assay Date:	*07/2017*
Expiration Date:	*7/2019*
Storage Temp:	*-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*
Effective Date:	*26 Jul 2013*

Assay Name/Specification (minimum release criteria)	Lot #0181707
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**
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 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**

* *The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.*

Authorized by
Derek Robinson
26 Jul 2013

Inspected by
Anthony Francis
20 Jul 2017

nqa. ISO 9001 Registered Quality Management

nqa. ISO 14001 Registered Environmental Management

nqa. ISO 13485 Registered Medical Devices