NEW ENGLAND BioLabs Inc.

be INSPIRED
drive DISCOVERY
stay GENUINE

240 County Road
Ipswich, MA 01938-2723

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New England Biolabs
Certificate of Analysis

Product Name:	*BsiI*
Catalog Number:	*R0555L*
Concentration:	*10,000 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 55°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10059634*
Expiration Date:	*11/2021*
Storage Temperature:	*-20°C*
Storage Conditions:	*50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version:	*PS-R0555S/L v1.0*

BsiI Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
R0555LVIAL	BsiI	10059633	**Pass**
B7204SVIAL	CutSmart® Buffer	10064409	**Pass**

Assay Name/Specification	Lot # 10059634
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 30 units of BsiI incubated for 16 hours at 55°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 50 units of BsiI incubated for 4 hours at 55°C releases <0.1% of the total radioactivity.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BsiI, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with BsiI.	**Pass**

This product has been tested and shown to be in compliance with all specifications.

nqa. ISO 9001 Registered Quality Management
nqa. ISO 13485 Registered Medical Devices
nqa. ISO 14001 Registered Environmental Management

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21 Nov 2019

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11 Feb 2020