New England BioLabs Inc.

be INSPIRED
drive DISCOVERY
stay GENUINE

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New England Biolabs
Certificate of Analysis

Product Name:	*BfaI*
Catalog Number:	*R0568S*
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 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10107090*
Expiration Date:	*04/2023*
Storage Temperature:	*-80°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-R0568S/L v2.0*

BfaI Component List

NEB Part Number	Component Description	Lot Number	Individual QC Result
R0568SVIAL	BfaI	10107088	Pass
B6004SVIAL	rCutSmart™ Buffer	10107576	Pass

Assay Name/Specification	Lot # 10107090
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 100 units of BfaI incubated for 4 hours at 37ºC releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of BfaI incubated for 16 hours at 37ºC 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 BfaI, ~25% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16ºC. Of these ligated fragments, >95% can be recut with BfaI.	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.

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

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Penghua Zhang
Production Scientist
21 May 2021

Josh Hersey
Packaging Quality Control Inspector
21 May 2021

ISO 9001
Registered
Quality
Management

ISO 13485
Registered
Medical Devices

ISO 14001
Registered
Environmental
Management