

New England Biolabs Certificate of Analysis

Product Name: BcoDI
Catalog Number: R0542S
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: 10164740
Expiration Date: 09/2024
Storage Temperature: -20°C
Storage Conditions: 200 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0542S/L v1.0

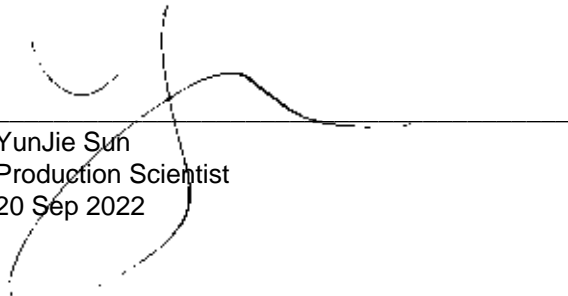
| BcoDI Component List | | | |
|----------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0542SVIAL | BcoDI | 10164739 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10161526 | Pass |

| Assay Name/Specification | Lot # 10164740 |
|---|----------------|
| Protein Purity Assay (SDS-PAGE) BcoDI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of BcoDI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BcoDI, >95% 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 BcoDI. | Pass |
| 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 BcoDI 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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Production Scientist
20 Sep 2022


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21 Sep 2022