

New England Biolabs Certificate of Analysis

Product Name: BanI
Catalog Number: R0118S
Concentration: 20,000 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: 10135739
Expiration Date: 01/2024
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-R0118S/L v1.0

| BanI Component List | | | |
|---------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0118SVIAL | BanI | 10135738 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10132778 | Pass |

| Assay Name/Specification | Lot # 10135739 |
|--|----------------|
| Protein Purity Assay (SDS-PAGE) BanI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BanI, >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 BanI. | Pass |
| Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 20 Units of BanI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme. | 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 BanI incubated for 4 | Pass |

| Assay Name/Specification | Lot # 10135739 |
|--|----------------|
| hours at 37°C releases <0.1% of the total radioactivity. | |

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
21 Feb 2022


Josh Hersey
Packaging Quality Control Inspector
21 Feb 2022