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## New England Biolabs Certificate of Analysis

Product Name: Banl
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: 10091239
Expiration Date: 08/2022
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

Banl Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0118SVIAL	Banl	10081409	Pass	
B7204SVIAL	CutSmart® Buffer	10089397	Pass	

Assay Name/Specification	Lot # 10091239
Protein Purity Assay (SDS-PAGE)	Pass
BanI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	
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 Banl 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
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
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 Banl incubated for 4	Pass



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Assay Name/Specification	Lot # 10091239
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.

Penghaa Zhang Production Scientist

17 Nov 2020

Josh Hersey

Packaging Quality Control Inspector

17 Nov 2020



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