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New England Biolabs Certificate of Analysis

Product Name: Banll
Catalog Number: R0119S
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: 10065836
Expiration Date: 02/2022
Storage Temperature: -20°C

Storage Conditions: 50 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-R0119S/L v1.0

Banll Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0119SVIAL	BanII	10065835	Pass	
B7204SVIAL	CutSmart® Buffer	10065748	Pass	

Assay Name/Specification	Lot # 10065836
Exonuclease Activity (Radioactivity Release)	Pass
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 30 units of BanII incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	
Thous at 37°C releases <0.2% of the total radioactivity.	
Ligation and Recutting (Terminal Integrity)	Pass
After a 10-fold over-digestion of Lambda DNA with BanII, >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 BanII.	
Non-Specific DNase Activity (16 hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of	1 433
10 Units of BanlI 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.	

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



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Stephanie Cornelio Production Scientist 30 Jan 2020 Jay Minichiello

Packaging Quality Control Inspector

04 Mar 2020