

New England Biolabs Certificate of Analysis


Product Name: *Blpl*
Catalog Number: *R0585L*
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.*
Lot Number: *10038686*
Expiration Date: *03/2021*
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-R0585S/L v1.0*

| Blpl Component List | | | |
|---------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0585LVIAL | Blpl | 10038687 | Pass |
| B7204SVIAL | CutSmart® Buffer | 10036664 | Pass |

| Assay Name/Specification | Lot # 10038686 |
|---|----------------|
| <p>Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 30 units of Blpl incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.</p> | Pass |
| <p>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 Blpl incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Blpl, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with Blpl.</p> | Pass |
| <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 10 units of Blpl incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p> | Pass |

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|--|----------------|
| Protein Purity Assay (SDS-PAGE) BlpI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection. | Pass |

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



Doreen Duquette
Production Scientist
05 Mar 2019



Josh Hersey
Packaging Quality Control Inspector
21 Mar 2019