

New England Biolabs Certificate of Analysis

Product Name: Bfal
Catalog Number: R0568S
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: 10060418
Expiration Date: 12/2021
Storage Temperature: -80°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0568S/L v2.0

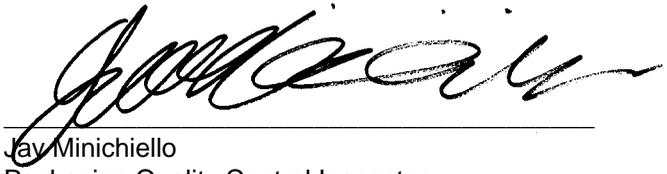
Bfal Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0568SVIAL	Bfal	10060420	Pass
B7204SVIAL	CutSmart® Buffer	10064406	Pass

Assay Name/Specification	Lot # 10060418
<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 Bfal incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</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 100 Units of Bfal 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
<p>Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of Lambda DNA with Bfal, ~25% 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 Bfal.</p>	Pass

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



Penghua Zhang
Production Scientist
09 Dec 2019



Jay Minichiello
Packaging Quality Control Inspector
07 Feb 2020