

New England Biolabs Certificate of Analysis

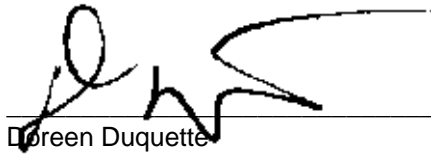
Product Name: BsrFI-v2
Catalog Number: R0682S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Lot Number: 10040824
Expiration Date: 04/2020
Storage Temperature: -20°C
Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 0.15 % TritonX-100, 200 µg/ml BSA, (pH 7.4 @ 25°C)
Specification Version: PS-R0682S/L v1.0

BsrFI-v2 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0682SVIAL	BsrFI-v2	10040574	Pass
B7204SVIAL	CutSmart® Buffer	10036666	Pass

Assay Name/Specification	Lot # 10040824
<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 30 units of BsrFai incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Functional Testing (15 minute Digest) A 50 µl reaction in CutSmart® Buffer containing 1 µg of pBR322 DNA and 1 µl of BsrFai incubated for 15 minutes at 37°C results in complete digestion as determined by agarose gel electrophoresis.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pBR322 DNA with BsrFai, >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 BsrFai.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of pBR322 DNA and a minimum of 10 units of BsrFai 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

Assay Name/Specification	Lot # 10040824
Protein Purity Assay (SDS-PAGE) BsrFal is $\geq 95\%$ 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
22 Mar 2019



Michael Tonello
Packaging Quality Control Inspector
29 Apr 2019