


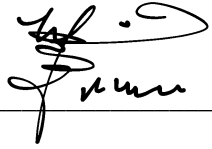
New England Biolabs Certificate of Analysis

Product Name: SbfI
Catalog Number: R0642S
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: 10057661
Expiration Date: 10/2021
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-R0642S/L v1.0

SbfI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0642SVIAL	SbfI	10056082	Pass
B7204SVIAL	CutSmart® Buffer	10061299	Pass

Assay Name/Specification	Lot # 10057661
Protein Purity Assay (SDS-PAGE) SbfI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass
Exonuclease Activity (Radioactivity Release) 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 50 units of SbfI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
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 SbfI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with SbfI, >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 SbfI.	Pass

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

Anthony Francis
Production Scientist
08 Oct 2019



Jay Minichiello
Packaging Quality Control Inspector
08 Jan 2020