

New England Biolabs Certificate of Analysis

Product Name: BsmI
Catalog Number: R0134S
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 65°C in a total reaction volume of 50 µl.
Lot Number: 10011687
Expiration Date: 06/2020
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0134S/L v1.0

BsmI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0134SVIAL	BsmI	10011688	Pass
B7204SVIAL	CutSmart® Buffer	10014372	Pass

Assay Name/Specification	Lot # 10011687
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 100 units of BsmI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BsmI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 4 hours at 25°C. Of these ligated fragments, >95% can be recut with BsmI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBR322 DNA and a minimum of 30 units of BsmI incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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



Penghua Zhang
Production Scientist
13 Jun 2018



Michael Tonello
Packaging Quality Control Inspector
15 Aug 2018