

## New England Biolabs Certificate of Analysis

**Product Name:** BsaJI  
**Catalog Number:** R0536L  
**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 60°C in a total reaction volume of 50 µl.  
**Lot Number:** 10008606  
**Expiration Date:** 04/2020  
**Storage Temperature:** -20°C  
**Storage Conditions:** 100 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.01% Triton X-100, 200 µg/ml BSA  
**Specification Version:** PS-R0536S/L v1.0

BsaJI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0536LVIAL	BsaJI	0201804	Pass
B7204SVIAL	CutSmart® Buffer	3091805	Pass

Assay Name/Specification	Lot # 10008606
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 50 units of BsaJI incubated for 4 hours at 60°C releases <0.1% of the total radioactivity.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 50 Units of BsaJI incubated for 16 hours at 60°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of Lambda DNA with BsaJI, >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 BsaJI.	Pass

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



Penghua Zhang  
Production Scientist  
03 Jul 2018



Josh Hersey  
Packaging Quality Control Inspector  
03 Jul 2018