

## New England Biolabs Certificate of Analysis

**Product Name:** BceAI  
**Catalog Number:** R0623L  
**Concentration:** 2,000 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:** 10041824  
**Expiration Date:** 04/2021  
**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-R0623S/L v1.0

BceAI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0623LVIAL	BceAI	10041825	Pass
B7203SVIAL	NEBuffer™ 3.1	10041637	Pass

Assay Name/Specification	Lot # 10041824
<p><b>Non-Specific DNase Activity (16 Hour)</b>            A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pBR322 DNA and a minimum of 2 Units of BceAI 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><b>Ligation and Recutting (Terminal Integrity)</b>            After a 5-fold over-digestion of pBR322 DNA with BceAI, &gt;95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, &gt;95% can be recut with BceAI.</p>	Pass
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 10 units of BceAI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass

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



Doreen Duquette  
Production Scientist  
05 Apr 2019



Jay Minichiello  
Packaging Quality Control Inspector  
19 Jun 2019