

## New England Biolabs Certificate of Analysis

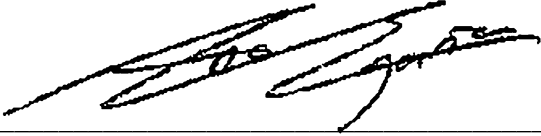
**Product Name:** *BceAI*  
**Catalog Number:** *R0623S*  
**Concentration:** *2,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10239249*  
**Expiration Date:** *03/2026*  
**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
R0623SVIAL	BceAI	10231502	Pass
B6003SVIAL	NEBuffer™ r3.1	10227734	Pass

Assay Name/Specification	Lot # 10239249
<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 <0.1% of the total radioactivity.	<b>Pass</b>
<b>Ligation and Recutting (Terminal Integrity)</b> After a 5-fold over-digestion of pBR322 DNA with BceAI, >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 BceAI.	<b>Pass</b>
<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.	<b>Pass</b>

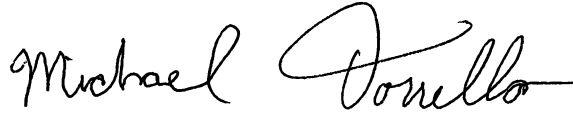
This product has been tested and shown to be in compliance with all specifications.

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05 Apr 2024



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Michael Tonello  
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05 Apr 2024