

## New England Biolabs Certificate of Analysis

**Product Name:** *pBR322 Vector*  
**Catalog #:** *N3033S/L*  
**Concentration:** *1,000 µg/ml*  
**Unit Definition:** *N/A*  
**Lot #:** *0941802*  
**Assay Date:** *02/2018*  
**Expiration Date:** *02/2020*  
**Storage Temp:** *-20°C*  
**Storage Conditions:** *10 mM Tris-HCl (pH 8.0), 1 mM EDTA*  
**Specification Version:** *PS-N3033S/L v1.0*  
**Effective Date:** *05 Dec 2016*

Assay Name/Specification (minimum release criteria)	Lot #0941802
<b>A260/A280 Assay</b> - The ratio of UV absorption of pBR322 Vector at 260 and 280 nm is between 1.8 and 2.0.	<b>Pass</b>
<b>DNA Concentration (A260)</b> - The concentration of pBR322 Vector is between 1000 and 1050 µg/ml as determined by UV absorption at 260 nm.	<b>Pass</b>
<b>Electrophoretic Pattern (Plasmid)</b> - The banding pattern of pBR322 Vector on a 1.2% agarose gel is evaluated against a control lot for sharpness and relative intensity as determined by gel electrophoresis using Ethidium Bromide.	<b>Pass</b>
<b>Non-Specific DNase Activity (DNA, 16 hour)</b> - A 50 µl reaction in 1X NEBuffer 2 containing 5 µg of pBR322 Vector 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>
<b>Restriction Digest (Linearization)</b> - A 50 µl reaction in NEBuffer 2.1 containing 5 µg of pBR322 Vector DNA and 20 units of HindIII incubated for 1 hour at 37°C produces > 95% linearization resulting in a single band of approximately 4361 bp as determined by agarose gel electrophoresis.	<b>Pass</b>



Authorized by  
Derek Robinson  
05 Dec 2016



Inspected by  
Vanessa Mathieu-Sheltry  
07 Feb 2018

