240 County Road Ipswich, MA 01938-2723

Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Product Specification

Product Name: pBR322 Vector
Catalog #: N3033S/L
Concentration: 1,000 µg/ml

Unit Definition: N/A
Shelf Life: 24 months
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: 07 Jul 2014

## Assay Name/Specification (minimum release criteria)

A260/A280 Assay - The ratio of UV absorption of pBR322 Vector at 260 and 280 nm is between 1.8 and 2.0.

DNA Concentration (A260) - The concentration of pBR322 Vector is between 1000 and 1050 µg/ml as determined by UV absorption at 260 nm.

Electrophoretic Pattern (Plasmid) - 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.

Non-Specific DNase Activity (DNA, 16 hour) - 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.

Restriction Digest (Linearization) - A 50  $\mu$ l reaction in NEBuffer 2.1 containing 5  $\mu$ g 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.

Date

07 Jul 2014

Derek Robinson

Director of Quality Control





