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## New England Biolabs Product Specification

Product Name:	pUC19 Vector
Catalog #:	N3041S/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-N3041S/L v1.0
Effective Date:	07 Jul 2014

Assay Name/Specification (minimum release criteria)

A260/A280 Assay - The ratio of UV absorption of pUC19 Vector at 260 and 280 nm is between 1.8 and 2.0.

**DNA Concentration (A260)** - The concentration of pUC19 Vector is between 1000 and 1050  $\mu$ g/ml as determined by UV absorption at 260 nm.

**Electrophoretic Pattern (Plasmid)** - The banding pattern of pUC19 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 pUC19 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 CutSmart<sup>TM</sup> Buffer containing 5  $\mu$ g of pUC19 Vector DNA and 20 units of XbaI incubated for 1 hour at 37°C produces > 95% linearization resulting in a single band of approximately 2686 bp as determined by agarose gel electrophoresis.

Derek Robinson Director of Quality Control



Date 07 Jul 2014