

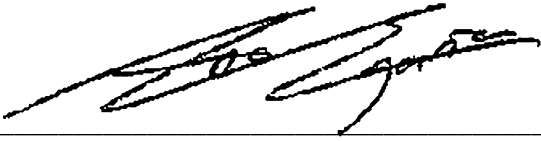
## New England Biolabs Certificate of Analysis

**Product Name:** *Monarch Genomic DNA Purification Kit*  
**Catalog Number:** *T3010S*  
**Lot Number:** *10028539*  
**Expiration Date:** *06/2020*  
**Storage Temperature:** *25°C*  
**Specification Version:** *PS-T3010S/L v1.0*

Assay Name/Specification	Lot # 10028539
<p><b>Functional Testing (Blood Cell Lysis Buffer, Monarch®)</b> Eight samples of whole pig blood are treated using the Cell Lysis protocol for Mammalian Whole Blood (non-nucleated), with <math>\geq 2 \mu\text{g}</math> of gDNA being recovered in <math>\geq 80\%</math> of the samples. OD 260/280 and 260/230 are <math>\geq 1.75</math> in <math>\geq 80\%</math> of the samples.</p>	<b>Pass</b>
<p><b>Functional Testing (Cell Lysis Buffer, Monarch®)</b> Genomic DNA is purified from 8 individual aliquots of HeLa cells ( 106 cells/aliquot) using the Cell Lysis protocol for cultured cells, resulting in <math>\geq 3 \mu\text{g}</math> of gDNA being recovered in <math>\geq 80\%</math> of the samples. OD 260/280 and 260/230 are <math>\geq 1.75</math> in <math>\geq 80\%</math> of the samples.</p>	<b>Pass</b>
<p><b>Functional Testing (DNA Recovery and Purity)</b> Twenty-four Monarch® gDNA Purification Columns are tested with <math>5 \mu\text{g}</math> of HindIII digested Lambda resulting in <math>\geq 75\%</math> recovery in <math>\geq 80\%</math> of the samples. OD 260/280 and 260/230 are <math>\geq 1.75</math> in <math>\geq 80\%</math> of the samples.</p>	<b>Pass</b>
<p><b>Functional Testing (RNase A, Monarch®)</b> A <math>10 \mu\text{l}</math> reaction in NEBuffer 4 containing <math>40 \text{ ng}</math> of fluorescein labeled RNA transcript and RNase A is incubated at <math>37^\circ\text{C}</math>. After incubation for 5 minutes, complete disappearance of the RNA substrate occurs at <math>\leq 1.0 \mu\text{g/ml}</math> of RNase A, as determined by gel electrophoresis using fluorescent detection.</p>	<b>Pass</b>
<p><b>Functional Testing (Tissue Lysis Buffer, Monarch®)</b> Genomic DNA is purified from 8 NEB10-Beta samples treated using the Supplemental Protocol for Genomic DNA Purification from Gram-negative Bacteria, resulting in <math>\geq 5 \mu\text{g}</math> of gDNA being recovered in <math>\geq 80\%</math> of the samples. OD 260/280 and 260/230 are <math>\geq 1.75</math> in <math>\geq 80\%</math> of the samples.</p>	<b>Pass</b>
<p><b>* Individual Product Component Note</b> Standard Quality Control Tests are performed for each component included in Monarch® Genomic DNA Purification Kit and meet the designated specifications.</p>	<b>Pass</b>

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





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Ana Egana  
Production Scientist  
25 Apr 2019



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Heidi Church  
Packaging Quality Control Inspector  
25 Apr 2019