

## New England Biolabs Certificate of Analysis

Product Name: *Monarch® Genomic DNA Purification Kit*  
 Catalog Number: *T3010L*  
 Packaging Lot Number: *10144613*  
 Expiration Date: *07/2024*  
 Storage Temperature: *25°C*  
 Specification Version: *PS-T3010S/L v2.0*

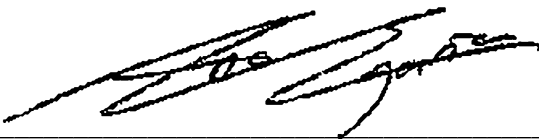
Monarch® Genomic DNA Purification Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
T3018-2	Monarch® RNase A	10137960	Pass
T3017-1	gDNA Purification 50 Columns	10137042	Pass
T3016-2	Monarch® gDNA Elution Buffer	10153316	Pass
T3015-2	Monarch® gDNA Wash Buffer	10153312	Pass
T3014-2	Monarch® gDNA Binding Buffer	10153307	Pass
T3013-2	Monarch® gDNA Blood Lysis Buffer	10153302	Pass
T3012-2	Monarch® gDNA Cell Lysis Buffer	10153267	Pass
T3011-2	Monarch® gDNA Tissue Lysis Buffer	10153257	Pass
T2018-1	Monarch® Collection Tubes II	10108836	Pass
P8107AAVIAL	Proteinase K, Molecular Biology Grade	10137996	Pass

Assay Name/Specification	Lot # 10144613
<p><b>Functional Testing (RNase A, Monarch®)</b>            A 10 µl reaction in NEBuffer 4 containing 40 ng of fluorescein labeled RNA transcript and RNase A is incubated at 37°C. After incubation for 5 minutes, complete disappearance of the RNA substrate occurs at ≤1.0 µg/ml of RNase A, as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<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 Protocol for Extraction and Purification of Genomic DNA from Cultured Cells, resulting in ≥3 µg of gDNA being recovered in ≥80% of the samples. OD 260/280 and 260/230 are ≥1.75 in ≥80% of the samples.</p>	Pass
<p><b>Functional Testing (Blood Cell Lysis Buffer, Monarch®)</b>            Genomic DNA is purified from 8 samples of whole pig blood using the Protocol for</p>	Pass

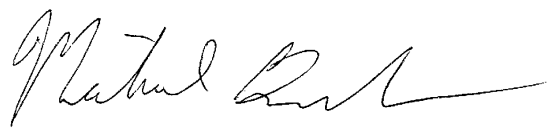
Assay Name/Specification	Lot # 10144613
<p>Extraction and Purification of Genomic DNA from Mammalian Whole Blood (non-nucleated), with <math>\geq 2 \mu\text{g}</math> of gDNA being recovered in <math>\geq 80\%</math> of the samples. OD 260/280 and 260/230 are <math>\geq 1.75</math> in <math>\geq 80\%</math> of the samples.</p>	
<p><b>* Individual Product Component Note</b> Standard Quality Control Tests are performed for each component included in Monarch<sup>®</sup> Genomic DNA Purification Kit and meet the designated specifications.</p>	<b>Pass</b>
<p><b>Functional Testing (Tissue Lysis Buffer, Monarch<sup>®</sup>)</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>Functional Testing (DNA Recovery and Purity)</b> Twenty-four Monarch<sup>®</sup> 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>

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



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25 Aug 2022



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