

## New England Biolabs Certificate of Analysis

Product Name: *Monarch® Genomic DNA Purification Kit*  
 Catalog Number: *T3010L*  
 Packaging Lot Number: *10144592*  
 Expiration Date: *04/2024*  
 Storage Temperature: *25°C*  
 Specification Version: *PS-T3010S/L v1.0*

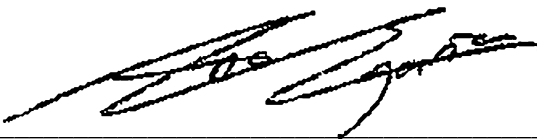
Monarch® Genomic DNA Purification Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
T3018-2	Monarch® RNase A	10137960	Pass
T3017-1	gDNA Purification 50 Columns	10108852	Pass
T3016-2	Monarch® gDNA Elution Buffer	10147134	Pass
T3015-2	Monarch® gDNA Wash Buffer	10147132	Pass
T3014-2	Monarch® gDNA Binding Buffer	10147130	Pass
T3013-2	Monarch® gDNA Blood Lysis Buffer	10147127	Pass
T3012-2	Monarch® gDNA Cell Lysis Buffer	10147125	Pass
T3011-2	Monarch® gDNA Tissue Lysis Buffer	10147119	Pass
T2018-1	Monarch® Collection Tubes II	10108836	Pass
P8107AAVIAL	Proteinase K, Molecular Biology Grade	10137996	Pass

Assay Name/Specification	Lot # 10144592
<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>	Pass
<p><b>Functional Testing (DNA Recovery and Purity)</b>            Twenty-four Monarch® gDNA Purification Columns are tested with 5 µg of HindIII digested Lambda resulting in ≥75% recovery 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 (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

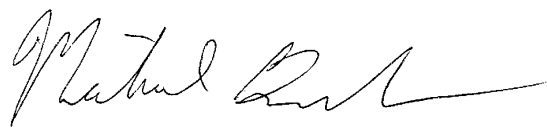
Assay Name/Specification	Lot # 10144592
<p><b>Functional Testing (Tissue Lysis Buffer, Monarch®)</b> Genomic DNA is purified from 8 NEB10-Beta samples treated using the Supplemental Protocol for Genomic DNA Purification from Gram-negative Bacteria, resulting in <math>\geq 5</math> <math>\mu\text{g}</math> 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 (Blood Cell Lysis Buffer, Monarch®)</b> Genomic DNA is purified from 8 samples of whole pig blood using the Protocol for Extraction and Purification of Genomic DNA from Mammalian Whole Blood (non-nucleated), with <math>\geq 2</math> <math>\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 Protocol for Extraction and Purification of Genomic DNA from Cultured Cells, resulting in <math>\geq 3</math> <math>\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>

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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04 May 2022



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