

## New England Biolabs Certificate of Analysis

**Product Name:** Monarch<sup>®</sup> Genomic DNA Purification Kit  
**Catalog Number:** T3010S  
**Packaging Lot Number:** 10144593  
**Expiration Date:** 04/2024  
**Storage Temperature:** 25°C  
**Specification Version:** PS-T3010S/L v1.0

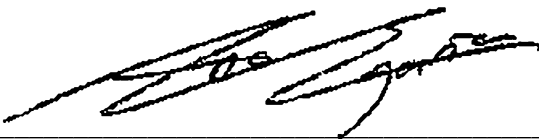
Monarch <sup>®</sup> Genomic DNA Purification Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
T3018-1	Monarch <sup>®</sup> RNase A	10137958	Pass
T3017-1	gDNA Purification 50 Columns	10108852	Pass
T3016-1	Monarch <sup>®</sup> gDNA Elution Buffer	10147133	Pass
T3015-1	Monarch <sup>®</sup> gDNA Wash Buffer	10147131	Pass
T3014-1	Monarch <sup>®</sup> gDNA Binding Buffer	10147129	Pass
T3013-1	Monarch <sup>®</sup> gDNA Blood Lysis Buffer	10147126	Pass
T3012-1	Monarch <sup>®</sup> gDNA Cell Lysis Buffer	10147123	Pass
T3011-1	Monarch <sup>®</sup> gDNA Tissue Lysis Buffer	10147111	Pass
T2018-1	Monarch <sup>®</sup> Collection Tubes II	10095123	Pass
P8107AAVIAL	Proteinase K, Molecular Biology Grade	10137996	Pass

Assay Name/Specification	Lot # 10144593
<b>Functional Testing (RNase A, Monarch<sup>®</sup>)</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.	<b>Pass</b>
<b>Functional Testing (DNA Recovery and Purity)</b> Twenty-four Monarch <sup>®</sup> 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.	<b>Pass</b>
<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.	<b>Pass</b>

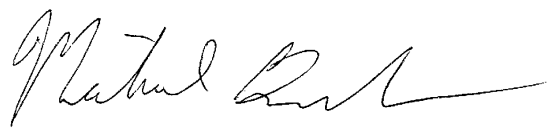
Assay Name/Specification	Lot # 10144593
<p><b>Functional Testing (Tissue Lysis Buffer, Monarch®)</b> Genomic DNA is purified from 8 NEB10-Beta samples treated using the Supplemental Protocol for Genomic DNA Purification from Gram-negative Bacteria, resulting in <math>\geq 5</math> <math>\mu\text{g}</math> 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.



Ana Egana  
Production Scientist  
27 Apr 2022



Michael Burzyk  
Packaging Quality Control Inspector  
27 Apr 2022