

## New England Biolabs Certificate of Analysis

**Product Name:** *Monarch® Genomic DNA Purification Kit*  
**Catalog Number:** *T3010S*  
**Packaging Lot Number:** *10215713*  
**Expiration Date:** *12/2024*  
**Storage Temperature:** *25°C*  
**Specification Version:** *PS-T3010S/L v2.0*

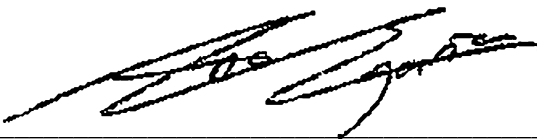
Monarch® Genomic DNA Purification Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
T3018-1	Monarch® RNase A	10162416	Pass
T3017-1	gDNA Purification 50 Columns	10170040	Pass
T3016-1	Monarch® gDNA Elution Buffer	10165773	Pass
T3015-1	Monarch® gDNA Wash Buffer	10165770	Pass
T3014-1	Monarch® gDNA Binding Buffer	10165767	Pass
T3013-1	Monarch® gDNA Blood Lysis Buffer	10182362	Pass
T3012-1	Monarch® gDNA Cell Lysis Buffer	10165757	Pass
T3011-1	Monarch® gDNA Tissue Lysis Buffer	10165751	Pass
T2018-1	Monarch® Collection Tubes II	10176509	Pass
P8107AAVIAL	Proteinase K, Molecular Biology Grade	10214461	Pass

Assay Name/Specification	Lot # 10215713
<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>
<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 \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 \mu\text{g}</math> of gDNA being recovered in <math>\geq 80\%</math> of the</p>	<b>Pass</b>

Assay Name/Specification	Lot # 10215713
<p>samples. OD 260/280 and 260/230 are <math>\geq 1.75</math> in <math>\geq 80\%</math> of the samples.</p>	
<p><b>Functional Testing (DNA Recovery and Purity)</b> Twenty-four Monarch® gDNA Purification Columns are tested with 5 <math>\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 10 <math>\mu\text{l}</math> 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 <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>

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  
15 Nov 2023



June Gaumont  
Packaging Quality Control Inspector  
15 Nov 2023