

## New England Biolabs Certificate of Analysis

**Product Name:** Monarch® Genomic DNA Purification Kit  
**Catalog Number:** T3010L  
**Packaging Lot Number:** 10209234  
**Expiration Date:** 10/2025  
**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	10210632	Pass
T3017-1	gDNA Purification 50 Columns	10207581	Pass
T3016-2	Monarch® gDNA Elution Buffer	10209232	Pass
T3015-2	Monarch® gDNA Wash Buffer	10209229	Pass
T3014-2	Monarch® gDNA Binding Buffer	10209093	Pass
T3013-2	Monarch® gDNA Blood Lysis Buffer	10209000	Pass
T3012-2	Monarch® gDNA Cell Lysis Buffer	10208996	Pass
T3011-2	Monarch® gDNA Tissue Lysis Buffer	10208985	Pass
T2018-1	Monarch® Collection Tubes II	10170031	Pass
P8200AAVIAL	Proteinase K, Molecular Biology Grade	10234387	Pass

Assay Name/Specification	Lot # 10209234
<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 (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 ≥2 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 (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</p>	Pass

Assay Name/Specification	Lot # 10209234
<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.

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19 Mar 2024



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