

## New England Biolabs Certificate of Analysis

**Product Name:** *Monarch Genomic DNA Purification Kit*  
**Catalog Number:** *T3010L*  
**Packaging Lot Number:** *10104305*  
**Expiration Date:** *11/2022*  
**Storage Temperature:** *25°C*  
**Specification Version:** *PS-T3010S/L v1.0*

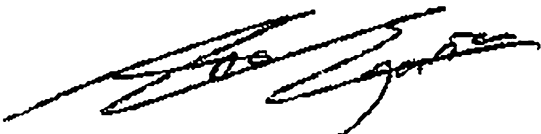
Monarch Genomic DNA Purification Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
T3018-2	Monarch® RNase A	10094335	Pass
T3017-1	gDNA Purification 50 Columns, IIC	10086482	Pass
T3016-2	Monarch gDNA Elution Buffer	10104388	Pass
T3015-2	Monarch gDNA Wash Buffer	10104333	Pass
T3014-2	Monarch gDNA Binding Buffer	10104327	Pass
T3013-2	Monarch gDNA Blood Lysis Buffer	10111097	Pass
T3012-2	Monarch gDNA Cell Lysis Buffer	10111094	Pass
T3011-2	Monarch gDNA Tissue Lysis Buffer	10104317	Pass
T2018-1	Monarch® Collection Tubes II (50)	10086488	Pass
P8107AAVIAL	Proteinase K, Molecular Biology Grade	10094342	Pass

Assay Name/Specification	Lot # 10104305
<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 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 \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® 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</p>	<b>Pass</b>

Assay Name/Specification	Lot # 10104305
<p>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® Genomic DNA Purification Kit and meet the designated specifications.</p> <p><b>Functional Testing (RNase A, Monarch®)</b> A 10 <math>\mu</math>l 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</math> <math>\mu</math>g/ml of RNase A, as determined by gel electrophoresis using fluorescent detection.</p> <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</math>g 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 style="text-align: center;"><b>Pass</b></p> <p style="text-align: center;"><b>Pass</b></p> <p style="text-align: center;"><b>Pass</b></p>

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

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