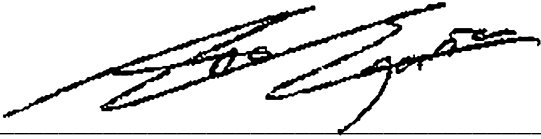


## New England Biolabs Certificate of Analysis

**Product Name:** *Monarch Genomic DNA Purification Kit*  
**Catalog Number:** *T3010S*  
**Packaging Lot Number:** *10041701*  
**Expiration Date:** *02/2021*  
**Storage Temperature:** *25°C*  
**Specification Version:** *PS-T3010S/L v1.0*

| Assay Name/Specification  | Lot # 10041701 |
|---|----------------|
| <p><b>Functional Testing (RNase A, Monarch®)</b><br/>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>             | <b>Pass</b>    |
| <p><b>Functional Testing (Tissue Lysis Buffer, Monarch®)</b><br/>Genomic DNA is purified from 8 NEB10-Beta samples treated using the Supplemental Protocol for Genomic DNA Purification from Gram-negative Bacteria, resulting in ≥5 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>                        | <b>Pass</b>    |
| <p><b>Functional Testing (DNA Recovery and Purity)</b><br/>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>   | <b>Pass</b>    |
| <p><b>* Individual Product Component Note</b><br/>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 (Cell Lysis Buffer, Monarch®)</b><br/>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 samples. OD 260/280 and 260/230 are ≥1.75 in ≥80% of the samples.</p> | <b>Pass</b>    |
| <p><b>Functional Testing (Blood Cell Lysis Buffer, Monarch®)</b><br/>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>        | <b>Pass</b>    |

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



---

Ana Egana  
Production Scientist  
25 Nov 2019

---

Darcie Spaulding  
Packaging Quality Control Inspector  
25 Nov 2019