

## New England Biolabs Certificate of Analysis

Product Name: *Monarch Total RNA Miniprep Kit*  
 Catalog Number: *T2010S*  
 Packaging Lot Number: *10053939*  
 Expiration Date: *10/2021*  
 Storage Temperature: *25°C*  
 Specification Version: *PS-T2010S v1.0*

Monarch Total RNA Miniprep Kit Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
T2018-1	Monarch® Collection Tubes II (50)	10054029	Pass
T2017-1	Monarch gDNA Removal Columns	10054005	Pass
T2014-1	Monarch RNA Wash Buffer	10054006	Pass
T2013-1	Monarch RNA Priming Buffer	10054011	Pass
T2012-1	Monarch RNA Lysis Buffer	10054010	Pass
T2011-1	Monarch DNA/RNA Protection Reagent	10054009	Pass
T2007-1	Monarch RNA Purification Columns	10054004	Pass
T2006-1	Monarch Nuclease-free Water	10054022	Pass
T2005-1	Monarch DNase I Reaction Buffer	10054020	Pass
T2004-1	Monarch DNase I	10054018	Pass
T2003-1	Monarch Proteinase K Reaction Buffer	10054016	Pass
T2002-1	Monarch Proteinase K Resuspension Buffer	10054014	Pass
T2001-1	Monarch Proteinase K	10054012	Pass

Assay Name/Specification	Lot # 10053939
<b>Functional Testing (DNA Recovery and Purity)</b> Twenty-four Monarch® RNA Purification Columns are tested with 10 µg of Lambda/BstEII Marker resulting in ≥75% recovery in ≥80% of the samples. OD 260/280 and 260/230 are ≥1.75 in ≥80% of the samples.	Pass
<b>Functional Testing (DNA Recovery)</b> Eight Monarch® gDNA Removal Columns are tested with 10 µg of Lambda/BstEII Marker resulting in ≥65% recovery in ≥80% of the samples.	Pass
<b>Functional Testing (DNase I, Monarch®)</b> A 50 µl reaction in Monarch® DNase I Reaction Buffer with 1 µg of pBR322 and 5 mU Monarch® DNase I incubated for 10 minutes at 37°C results in digestion of the DNA	Pass

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fragments to ≤500 bp as determined by agarose gel electrophoresis.	
<p><b>Functional Testing (Proteinase K, Monarch®)</b> A 20 µl reaction in Monarch® Proteinase K Reaction Buffer with 10 µg of MBP5 and 50 ng Monarch® Proteinase K incubated for 5 minutes at 37°C results in &gt;75% digestion of the protein as determined by SDS-PAGE using Coomassie Blue detection.</p>	<b>Pass</b>
<p><b>Functional Testing (RNA Yield and Integrity Analysis)</b> Total RNA is purified from 8 individual aliquots of HeLa cells (106 cells/aliquot). Yield of RNA is &gt;5 µg in ≥75% of the samples. OD 260/280 and 260/230 are ≥1.75 in ≥80% of the samples as well as RIN values ≥8 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  
11 May 2020



Heidi Church  
Packaging Quality Control Inspector  
11 May 2020