

## New England Biolabs Certificate of Analysis

**Product Name:** *Monarch® Total RNA Miniprep Kit*  
**Catalog Number:** *T2010S*  
**Packaging Lot Number:** *10214458*  
**Expiration Date:** *12/2024*  
**Storage Temperature:** *25°C*  
**Specification Version:** *PS-T2010S v2.0*

<b>Monarch® Total RNA Miniprep Kit Component List</b>			
<b>NEB Part Number</b>	<b>Component Description</b>	<b>Lot Number</b>	<b>Individual QC Result</b>
T2018-1	Monarch® Collection Tubes II	10166717	<b>Pass</b>
T2017-1	Monarch® gDNA Removal Columns	10166715	<b>Pass</b>
T2014-1	Monarch® RNA Wash Buffer	10210881	<b>Pass</b>
T2013-1	Monarch® RNA Priming Buffer	10210878	<b>Pass</b>
T2012-1	Monarch® RNA Lysis Buffer	10210876	<b>Pass</b>
T2011-1	Monarch® DNA/RNA Protection Reagent	10210874	<b>Pass</b>
T2007-1	Monarch® RNA Purification Columns	10166632	<b>Pass</b>
T2006-1	Monarch® Nuclease-free Water	10210799	<b>Pass</b>
T2005-1	Monarch® DNase I Reaction Buffer	10210787	<b>Pass</b>
T2004-1	Monarch® DNase I	10210748	<b>Pass</b>
T2003-1	Monarch® Proteinase K Reaction Buffer	10210746	<b>Pass</b>
T2002-1	Monarch® Proteinase K Resuspension Buffer	10210743	<b>Pass</b>
T2001-1	Monarch® Proteinase K	10210741	<b>Pass</b>

Assay Name/Specification	Lot # 10214458
<p><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.</p>	<b>Pass</b>
<p><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.</p>	<b>Pass</b>
<p><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 fragments to ≤500 bp as determined by agarose gel electrophoresis.</p>	<b>Pass</b>
<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.

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11 Jan 2023



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