

New England Biolabs Product Specification

Product Name: Monarch[®] Total RNA Miniprep Kit
Catalog #: T2010S
Kit Components: Monarch[®] gDNA Removal Columns (T2017)
Monarch[®] RNA Purification Columns (T2007)
Monarch[®] Collection Tubes II (T2018)
Monarch[®] DNA/RNA Protection Reagent (T2011)
Monarch[®] RNA Lysis Buffer (T2012)
Monarch[®] Proteinase K (T2001)
Monarch[®] Proteinase K Resuspension Buffer (T2002)
Monarch[®] Proteinase K Reaction Buffer (T2003)
Monarch[®] DNase I (T2004)
Monarch[®] DNase I Reaction Buffer (T2005)
Monarch[®] RNA Priming Buffer (T2013)
Monarch[®] RNA Wash Buffer (T2014)
Monarch[®] Nuclease-free Water (T2006)

Shelf Life: 18 months
Storage Temp: 25°C
Specification Version: PS-T2010S v1.0
Effective Date: 09 Nov 2017

Assay Name/Specification (minimum release criteria)

Functional Testing (DNA Recovery and Purity) - 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.

Functional Testing (DNA Recovery) - Eight Monarch[®] gDNA Removal Columns are tested with 10 µg of Lambda/BstEII Marker resulting in ≥65% recovery in ≥80% of the samples.

Functional Testing (DNase I, Monarch[®]) - 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.



New England Biolabs Product Specification

Assay Name/Specification (minimum release criteria)

<p>Functional Testing (Proteinase K, Monarch®) - 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 >75% digestion of the protein as determined by SDS-PAGE using Coomassie Blue detection.</p>

<p>Functional Testing (RNA Yield and Integrity Analysis) - Total RNA is purified from 8 individual aliquots of HeLa cells (10⁶ cells/aliquot). Yield of RNA is >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>



Date 09 Nov 2017

Derek Robinson
Director of Quality Control

