

# Total RNA Purification

## PureYield™ RNA Midiprep System

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Pure, total RNA

No detectable DNA

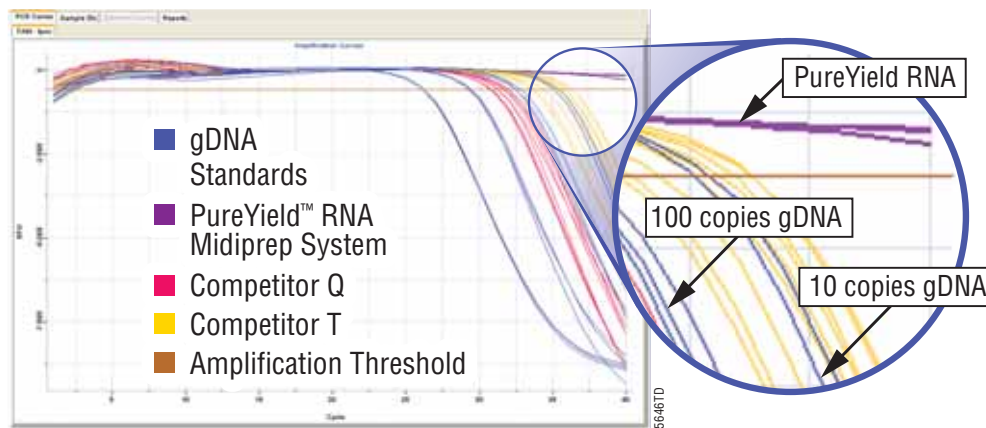


**Promega**

## Match your leading-edge research with the latest advancement in RNA purification.

Keep up with today's sensitive analysis methods by recovering pure, total RNA with undetectable genomic DNA contamination. The PureYield™ RNA Midiprep System<sup>a,b</sup> uses a novel approach that selectively removes all detectable genomic DNA prior to RNA isolation—allowing you to move directly to downstream applications without expensive and time-consuming DNase treatments.

## Eliminate Genomic DNA



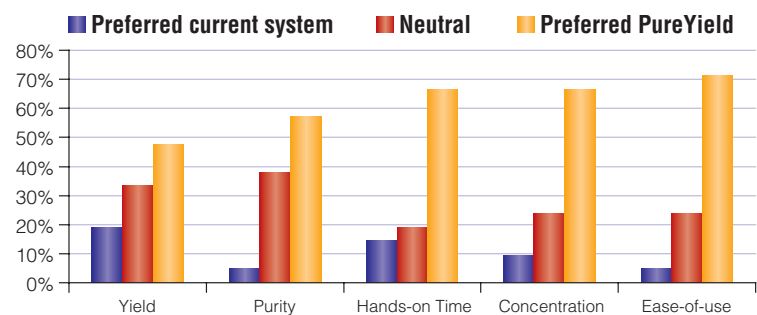
Quantitative PCR of total RNA isolated from  $1 \times 10^8$  HEK 293T cells using a number of competitive products show that only the samples isolated using the PureYield RNA Midiprep System are free of contaminating genomic DNA.

- Increase accuracy of downstream analysis
- Gain confidence in research results
- Reduce steps in purification and in downstream applications
- Abolish costly and time-consuming DNase treatments

## What Scientists Think

*81% of testers surveyed would purchase PureYield RNA and 95% would recommend it to a colleague.*

### Tester Preferences



Testers were asked to purify multiple samples using PureYield™ RNA Midiprep System alongside their current RNA purification system. Upon completion of sample preparation, participants were asked to compare systems and share product performance information.

# PureYield™ RNA Midiprep

## High Yield

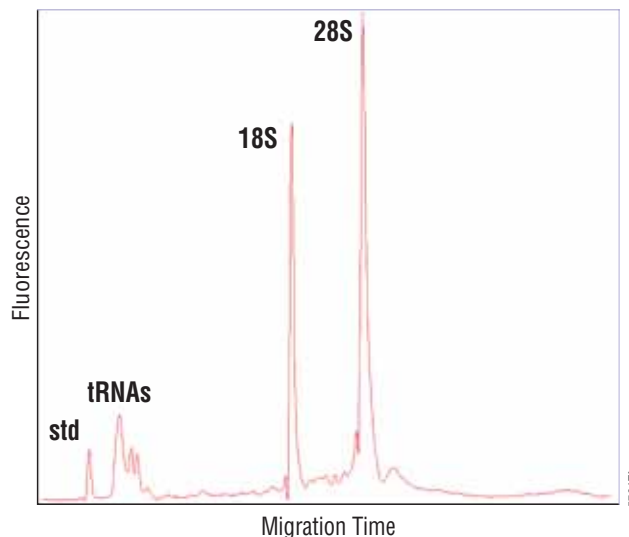
### Average Yields of Total RNA Isolated from Tissues and Cells.

Sample Type	Sample Amount	Average Yield per Prep ( $\mu\text{g}$ ) <sup>1</sup>	Average $A_{260}/A_{280}$
<b>Rat Tissues</b>			
Liver	300mg	990.7	1.9
Lung	300mg	193.9	2.1
Kidney	200mg	329.1	2.1
Spleen	150mg	430.9	2.1
Brain	300mg	305.5	2.1
Heart	300mg	255.3	2.1
Muscle	300mg	115.1	2.1
<b>Bacteria</b>			
<i>E. coli</i>	$1 \times 10^{10}$ cells	872.7	2.1
<b>Plant Tissue</b>			
Canola	300mg	87.8	2.1
<b>Cell Lines</b>			
HEK 293T	$5 \times 10^7$ cells	453.3	1.9
HeLa	$5 \times 10^7$ cells	329.2	2.0
<b>Blood</b>	20ml (10ml/tube)	$\sim 10^*$	*

1. The values represent means of results achieved at Promega. Yields will depend on the metabolic state of the sample, culture conditions, harvesting conditions and sample preparation. The average total RNA yield shown is from a 1ml elution.

\* Varies by white cell count. A white cell count of  $\sim 5 \times 10^6$  cells/ml yields  $\sim 10\mu\text{g}$  of total RNA.

## High Quality



Total RNA isolated from HEK 293T cells using the PureYield™ RNA Midiprep System. The high quality of the RNA is shown by scanning with the Agilent 2100 Bioanalyzer.

*High Yield and Quality Means Enhanced Performance*



## Downstream Applications

- qRT-PCR (Plexor™ One-Step System)
- RT-PCR (Access RT-PCR System)
- cDNA Synthesis (ImProm-II™ Reverse Transcription System)
- Microarray analysis
- Northern analysis

### Frequently Asked Questions:

**Q: Is DNase included?**

*A: This system uses a novel method that removes all detectable gDNA prior to RNA isolation. DNase is not needed and not included.*

**Q: Do I need any special equipment?**

*A: Yes, you need a swinging-bucket rotor for all centrifugation steps that include a PureYield column.*

**Q: What is the easiest way to suspend the clearing agent?**

*A: Use a vortex.*

**Q: How pure is the isolated RNA?**

*A: A<sub>260</sub>/A<sub>280</sub> ratios are typically around 2.0.*

### Compare PureYield RNA

	PureYield™	Qiagen RNeasy®	TRIzol®
Feature			
No DNA Contamination	++++	++	++
Speed	+++	+++	+++ <sup>1</sup>
Yield	+++	++ <sup>2</sup>	+++ <sup>2</sup>
Purity	++++	+++	+
Safety	+++	+++	+
Price/prep <sup>4</sup>	\$9.00	\$11.76	\$5.51/10.21 <sup>3</sup>

1. Includes post purification precipitation and clean-up  
 2. Yield is exaggerated by presence of gDNA  
 3. Includes post purification clean-up with a column-based purification product  
 4. Based on US List price of largest available kit size, including any optional DNase treatments

### Ordering Information

Product	Size	Cat. #
PureYield™ RNA Midiprep System	10 preps	Z3740
	50 preps	Z3741

ImProm-II, Plexor and PureYield are trademarks of Promega Corporation.

<sup>(a)</sup> U.S. Pat. No 6,194,562, Australian Pat. No. 740145, Canadian Pat. No. 2,329,067 and other patents pending.

<sup>(b)</sup> Patent pending.

RNeasy is a registered trademark of Qiagen GmbH Corporation.

TRIzol is a registered trademark of Molecular Research Center, Inc.

