

PLANT RNA PURIFICATION KITS

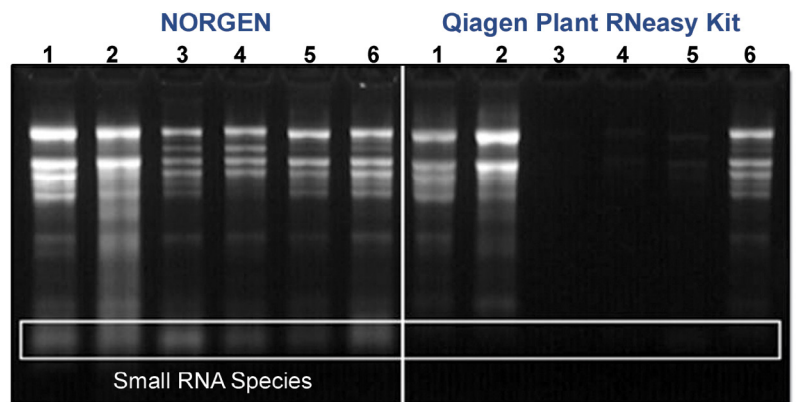
BEST-IN-CLASS



The Best Kit for Challenging Plant Samples for the Following 6 Reasons:

1. Superior performance for challenging plant samples

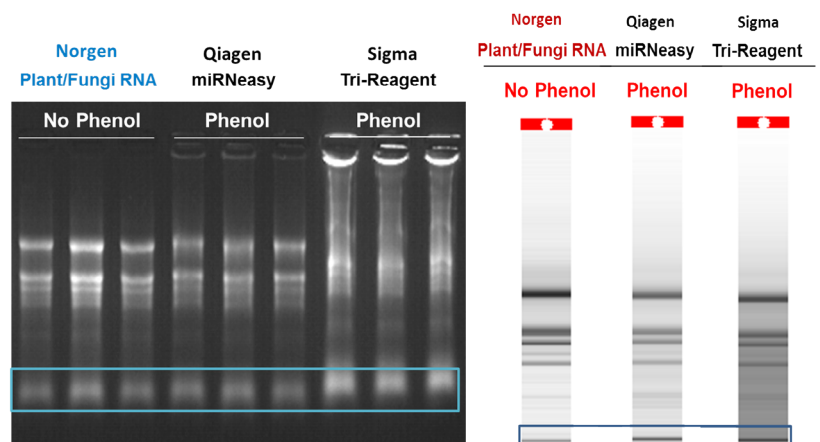
- ✔ A single robust plant RNA lysis solution works for a wide range of plant species
- ✔ Only Norgen's kit was able to isolate the small RNA species (white box)



Total RNA isolated from 50 mg leaves of various plants: Lanes: 1-Apple, 2-Peach, 3-Grape, 4-Pine, 5-Strawberry, 6-Pear. Total RNA was eluted in 50 ul and 7.5 ul was loaded on 1.2% MOPS agarose gel.

2. Phenol-Free and True Total RNA (including microRNA)

- ✔ Novel RNA binding matrix (not silica) for small and total RNA
- ✔ Environmentally friendly RNA purification
- ✔ Purify small RNA without phenol (blue box)
- ✔ True total RNA profile without losing large RNA



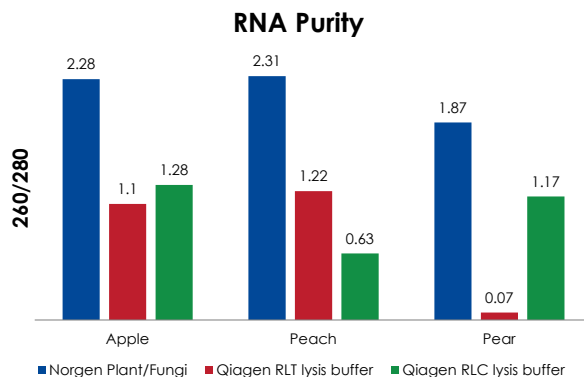
Total RNA from 0.1 mg of young peach leaves was purified with three different methods and 7.5 ul of the 50 ul were loaded on 1.2% MOPS and formaldehyde RNA gel (Panel A) and 1 ul of the 50ul was analyzed on the Agilent® 2100 BioAnalyzer RNA Nano 6000 chip (Panel B).

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3. High Purity of RNA Samples

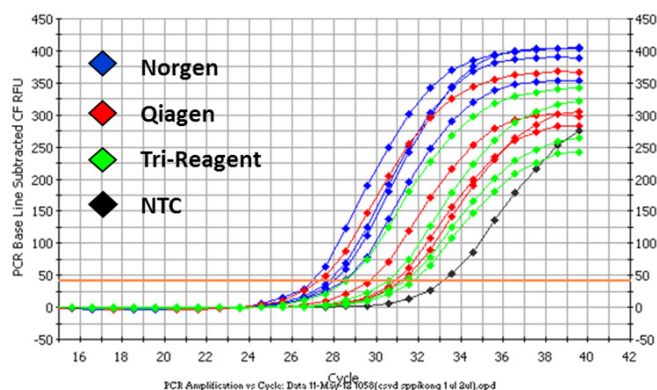
- Single robust plant lysis buffer works better than two lysis buffer system from the competitor (Apple, peach, and pear)



High Purity of RNA Samples Isolated from Apple, Peach and Pear

4. Excellent Yield and Quality for Any Downstream Application

- Total RNA was purified from 100 mg of Chrysanthemum leaves using three different plant RNA isolation methods
- Norgen's kit allows for sensitive viroid detection



Detection of CSVD by qRT-PCR

Amplifications were performed using Norgen's 2x PCR master mix (Cat.#28007) in iCycler iQ real-time PCR machine (Bio-Rad).

5. Variety of Applications

- RNA seq
- Next Generation Sequencing
- RT-PCR
- qRT-PCR
- Pathogen detection e.g. viroid
- Northern blotting

	Norgen Biotek	Leading Competitor
Robust Lysis Solution for Any Plant?	YES	NO
Phenol	NO	YES
Recovery of microRNA?	YES	NO
Protocol Time	15 minutes	25 minutes

6. Excellent Quality at an Affordable Price

- Norgen's kits are priced at a more affordable rate than the leading competitor

	Plant/Fungi RNA Kit	Leading Competitor Kit
Kit Price (USD)	\$289.41	\$333.00
Price Per Prep (USD)	\$5.79	\$6.66

PLANT RNA PURIFICATION KITS

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Featured Products

Kit Name	Size	Cat. #
Plant/Fungi RNA Purification Kit	50 preps	25800
Plant/Fungi RNA Purification Kit	96 preps	31300
Plant/Fungi RNA Purification Kit 96-Well	2 x 96 well plates	31900

Related Products

Kit Name	Size	Cat. #
Plant RNA/DNA Purification Kit	50 preps	24400
Plant/Fungi DNA Purification Kit	50 preps	26200
Plant/Fungi DNA Purification Kit 96-Well	2 x 96 well plates	26900
TruScript™ Reverse Transcriptase	10,000 Units	54440
TruScript™ First Strand cDNA Synthesis Kit	50 reactions	54420
TruScript™ First Strand cDNA Synthesis Kit for mRNA	50 reactions	54400
Bead Tubes AP	50/bag	26230
Bead Tubes AP	100/bag	26231

Featured Customer Testimonials:

"I am very pleased to inform you that Plant/Fungi Total RNA Isolation Kit worked very well for Sorghum sample. In a very short time we were able to isolate good quality and quantity RNA."
- University of Kentucky

"It is great!!!! I can't take all the credit. Your kit is truly amazing. I have been telling others here about it."
- Agriculture and Agrifood Canada

SELECT PUBLICATIONS

miRNA Sequencing

Title: Transcriptional landscape of *Aspergillus niger* at breaking of conidial dormancy revealed by RNA-sequencing.

Authors: Novodvorska M, Hayer K, Pullan ST, Wilson R, Blythe MJ, Stam H, Stratford M, Archer DB.

Journal: BMC Genomics. 2013.

Title: Graft-induced Changes in MicroRNA Expression Patterns in Citrus Leaf Petioles.

Authors: R. Tzarfati, S.Ben-Dor, I. Sela and E.E. Goldschmidt

Journal: The Open Plant Science Journal. 2013.

Title: Identification and Characterization of miRNA Transcriptome in Potato by High-Throughput Sequencing.

Authors: Zhang R, Marshall D, Bryan GJ, Hornyik C.

Journal: PLoS One. 2013.

Title: Identification and Characterization of miRNA Transcriptome in Potato by High-Throughput Sequencing.

Authors: Zhang R, Marshall D, Bryan G, Hornyik C.

Journal: PLoS One. 2013.

Gene Expression Study

Title: Expression analysis of histone acetyltransferases in rice under drought stress.

Authors: Fang H, Liu X, Thorn G, Duan J, Tian L.

Journal: Biochemical and Biophysical Research Communications. 2013.

Title: The transcription factor SISHINE3 modulates defense responses in tomato plants.

Authors: Buxdorf K, Rubinsky G, Barda O, Burdman S, Aharoni A, Levy M.

Journal: Plant Mol Biology. 2013.

Title: An Arabidopsis homolog of importin beta 1 is required for ABA response and drought tolerance.

Authors: Luo Y, Wang Z, Ji H, Fang H, Wang S, Tian L, Li X.

Journal: The Plant Journal. 2013.

Title: Novel variants of grapevine leafroll-associated virus 4 and 7 detected from a grapevine showing leafroll symptoms.

Authors: Ito T, Nakaune R, Nakano M, Suzaki K.

Journal: Archives of Virology. 2013.

Title: Silencing of the Host Factor eIF(iso)4E Gene Confers Plum Pox Virus Resistance in Plum.

Authors: Wang X, Kohalmi SE, Svircev A, Wang A, Sanfaçon H, Tian L.

Journal: PLoS One. 2013.

Title: Weak-acid preservatives: pH and proton movements in the yeast *Saccharomyces cerevisiae*.

Authors: Stratford M, Nebe-von-Caron G, Steels H, Novodvorska M, Ueckert J, Archer DB.

Journal: International Journal of Food Microbiology. 2012.

Title: Gene expression indicates a zone of heterocyst differentiation within the thallus of the cyanolichen *Pseudocyphellaria crocata*.

Authors: Chua JP, Wallace EJ, Yardley JA, Duncan EJ, Dearden PK, Summerfield TC.

Journal: New Phytologist. 2012

Title: Novel variants of grapevine leafroll-associated virus 4 and 7 detected from a grapevine showing leafroll symptoms.

Authors: Ito T, Nakaune R, Nakano M, Suzaki K.

Journal: Archives of Virology. 2012



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